An Essay on Group
by
Fergus Armstrong
Group.


Classification. 1. Class. Febrile Diseases; 2. Diseases of the Larynx and Trachea; 3. order Inflammation (Cahen); 3. suborder, Inflammations (G ооd).

Nozological Definition. Accelerated, difficult, wheezing or stridulous respiration; short, dry, constant, laugious or barking cough; hoarse or altered voice; pain or constriction above the Sternum; with symptoms like inflammatory fever; frequently, towards the close of the disease, aspiration of membranous, albuminous or glutinous substances, occurring in children.

Pathological Definition. Inflammation of the Trachea, sometimes of the Larynx and Trachea, and frequently also extending to the large bronchi, occasioning albuminous, membranous, non-adherent, more or less spasm of those parts; and terminating either in suffocation or exhaustion of vital power, generally in a few days or months. The period constituting an acute malady.

Literary History etc. This is a disease to which a great variety of names have been given; but of the whole of them, Group appears to be as good.
as any, if not the best, as it conveys no erroneous notion of the disease, which it designates, as a great many of the others are apt to do.

This disease, although never clearly described, until the middle of the last century, when the work of Home appeared, and although its existence was scarcely recognized until then, yet there can be no doubt of its occurrence among children from the earliest ages, as may be gathered from the description, however vague given by some of the older writers, which show that it was not altogether overlooked; and it is now probably as well understood as most of the other diseases to which we are liable.

The first regular history of it, so that furnished by an Italian Physician, Martin Ghisi, under the name of Anginea Tropitosa. But previous to that time, it had been mentioned, and shorty described, under its present name, by Dr. Blair of Cape Angus. Nevertheless, published the fullest accounts of it under the name of Anginea Polytona, in 1718.

D Home of Edinburgh also published an essay upon it in 1765, from observations made upon it in Luth and Mussburgh, in the former of which places, it appears to have been remarkably prevalent.
The same places also furnished materials for the able essays of Dr. Cheyne, upon the same subject, who appears to have been one of the best of late writers upon the subject.

Napoleon, indeed in 1807, in consequence of the death of his nephew of this disease, offered a prize for the best essay on this disease, which called forth numerous productions from various foreign physicians, in which very little was omitted, that could in any way illustrate the affection.

**Forms & Progress of the Disease**

 Corp has been considered ever since the days of Homer, as an inflammation of the inner surface of the Throat & Larynx.

It is divided by some authors, into 3 distinct varieties; viz.: 1. **Bacterial Corp**, which is the mildest form of the disease; 2. **Neural or Spasmodic Corp**, a slighter state of inflammation, freezing rise in nerves, irritable temperaments, to a Spasmodic form of it. 3. **Inflammatory Corp**, where the inflammation is of a much grave type, and always leading to the production of a false membrane.

As Dr. Guillebert & Bruton have considered only such cases as Corp, where the false membrane is.
formed, all others are termed by them Cats. Corp.

Symptoms. These are generally divided by authors into three stages. Mr. Goelis divides them into 3 stages; Dr. Cheyne has adopted a division, not much different, while Dr. Copland classifies them under three heads,
1. Those of Invasion;
2. Those of the developed stage;
3. Those of the collapsed or Suffocation stage.

1. The first symptoms of an attack of Catsop, are not very much marked, although sometimes they may be; they are commonly of a Catarhal nature. Sometimes they are very slight, of a febrile nature and very often from this cause overlooked.

The febrile symptom when present, usually consists of alternate chills and heat, along with flushing.

Then, if it is more acute, with chills and fever, followed by heat of skin, hard, frequent pulse, flushed countenance, want of appetite, headache, leucorrhoea.

The patient is more restless.

This is often also, in addition to these, a slight cough, the child sneezes in haecne... in reference to this last, Dr. Cheyne makes the remark, that hoarseness, in very young children, does not usually attend common Catarhal, but when observed in a child living in a district, where Catsop.
is apt to occur... deserves more attention, especially if accompanied with a cough; than if it occurs in a person after puberty. This is a remark of great importance, considering how much depends upon the early treatment in this disease.

Besides these symptoms, the chills do not stop after a feverish attack, and manifest an uneasiness about the throat, by the frequent application of the hand to it. The child is frequently attacked during the night, waking with the rusty cough, etc. although it might have gone to bed quite well.

Great attention has been paid to the presomitory symptoms, by different writers, in consequence of the results of the case, depending in a great measure upon the prompt use of remedies in this disease. But there really is no symptom which can be relied upon until the disease is nearly fully formed. Yet it is of importance in those districts where the whooping cough is known to occur, to keep a careful watch for the premonitory symptoms.

These symptoms may be present, from an hour or two to 2 or 3 days.

2. The developed stage of the disease, comes on after the former symptoms have lasted for a longer or shorter time; it is manifested...
according to Dr. Williams, (by means of the Stethoscope applied over the neck, by which the audible breathing may be heard) long before, it is otherwise distinct.

In the course of two days or two, the signs peculiar to Croup, began to show themselves, which are so well laid down by Cullen, as Syncope, respiration difficult, inspirahione stertoris, ore fessa, tepse Aperite, trismus pellacis in facie, apopnest, deglutitio parum difficile, cura prope syncope... These are the symptoms by which croup is characterized... Aspasmus, difculty of breathing, and sonorous inspiration... The last is almost sufficient to identify the disease.

The very peculiar and distinctive cough to which the name of croupy has been justly applied; it rings as if the child had coughed through a bronzen trumpet, and can scarcely fail to be recognised by any one who has ever heard it. The pulse becomes frequent & hard; the respiration very strongly; the skin is hot; the face flushed; eyes watery & injected; and the head is more generally thrown backwards, so the child plainly indicates, by its gestures or speech, that there is great uneasiness about the Trachea. Syncope...
and feeling of constriction.

The above symptoms, which generally appear in the evening or at night, somewhat subside towards morning, vacating the frequency of pulse, hoarseness, cough, & rauous inspiration. The symptom may last until evening, or until the patient falls asleep, when the symptom soon return in an aggravated form. All the symptoms become much worse, especially the Cough & breathing. The Cough, which before was dry, now becomes mostly a Sputum, with attempts to expel the matter from the Larynx; it sometimes ends in the vomiting of viscid phlegm streaked with blood; or sometime, cast of the Mucus are cast up. — The voice becomes smaller, having a husky sound; and at last is totally suppressed. The voice becomes more frequent than before; smaller, face of a sick person. A purple or livid during the paroxysms of coughing, and during the interval the child lies in a half stupid state.

Throughout this stage, and indeed during the whole disease, the bowels are constipated & the urine scanty & highly coloured.

The disease may pass through this stage, in 24 hours; but in some cases it may last for
Several days.
When vomiting has come on, particularly when it is accompanied by the albuminous, gingery excrustation, it may terminate in recovery, without passing into the third stage.

3. The third stage may commence from the 1st to the 7th day, according to the intensity of the disease.

This is the stage of Collapse, and is characterized by the absence of remissions; a great failure of the vital powers. The pulse is more weak, small, irregular or even intermittent; the breath more suppured, and the voice either low or lost entirely. The motions of the ileus have a parasitic of the chest are forcible and remarkable; the head is constantly thrown back, the face swollen; their cold & perspiring, the distended superficial veins showing themselves through it. The countenance often has a leaden appearance; tongue dark & swollen; stool, are dark and offensive; the effort of the patient become weaker and weaker, and at length cease. Infants are sometimes cut off by convulsions.

Recovery from this state seldom takes place.
From the great noise, made by tracheal breathing, it is no easy matter to investigate the state of the
chest, but there may be heard more especially after
a fit of coughing, a general spongy shivering over
the whole lung. The chest may also be dull on
percussion.

This is the usual course of Croup in its more severe
forms, and when uncomplicated, but like other
inflammatory disorders, it may vary in intensity
or may exhibit Asthenie, Asthenie is nothable
regard to the floor of inflammation, and it also
may have more or less of the Spasmodic, character.

The Asthenie form occurs in robust, plathonic-
children of the Sanguine temperament. This is nearly
the more acute and severe form of the disease, it
is characterized by the more continued and interrupted
severity of the symptoms, higher fever, hard cough
slime, pulse, pain in larynx, and emphem
promptly treated, passes into the last stage in a
very short time, and proves fatal in from 12 to
to 5 or 6 days.

The Asthenic, form chiefly takes place in
children, those of a weakly nature, in those who have
been weaned early, or those who have been brought
up without the breast, and especially in those
reduced by previous disease; the fever in these
is low, and the progress of the disease slow, but
the stage of collapse comes in early especially of the disease be severe.

The caterhal variety is pretty common a forms the link between the others.

It is attended with cough and various riles in the chest and is of very serious import. Like both group of bronchitis in children it is liable to remission or exacerbations. It may supersede on Bronchitis and on the other hand Bronchial Symptoms may supersede on group, making the case one of great danger and aggravating the disease very much.

The spasmodie form of inflammatory group is that form which presents a greater amount of spasm than the others do. and recurs chiefly in children of an irritable nervous temperament.

It may be combined with various mepg, with inflammatory symptoms, sometimes presenting none. The inflammatory generally has spasm more or less mixed with it.

The presence of pain in the intestines as by mepg, may cause this form of true Spasmodie Group.

Group is also often complicated with other disease as by males or a very dangerous complication with the Exanthematous and likewise with
various other diseases, which require the treatment to be somewhat modified.

Prognosis is unfavorable; it is certainly a most serious and fatal disorder, which if not speedily arrested, frequently goes on to a fatal termination, and very often indeed baffles all treatment even the most active.

The mortality from it is very great, it was stated to have been formerly as high as four-fifths of those attacked, but that now as the disease is better understood, than it was formerly, the mortality has much decreased.

According to Dr. Dale, the mortality at present is about one-half of the whole of those attacked, which also Dr. Alison says he does not think to be exaggerated.

The deaths might not have been so numerous, had all the cases been seen, as probably there were cases which never were seen at all, and which if they had been judiciously treated might have terminated favorably; considering that active treatment, at the commencement of the disease, is of the most aid.

There are also numbers which are never seen until too late to arrest the rapid and fatal progress of the disease, and where the medical attendant can do little else than look on.
Besides these, there are a great number of cases, which occur in weakly children, those recovering from smallpox, measles, fever, or other anthaphlogies cannot be used.

The prognosis is most favorable, when there is a remission, for hours together, of all the symptoms, with a copious expectoration of mucous mucus, and membranous phlegm, and when the strength remains entire.

It is unfavorable, in those cases where there is clamps of skin, lividity of the countenance, pulse palpable and intermittent, affecting of the brain and esophagus. This is very seldom recovery after intermixing of pulse. Dr. Allison saw these cases which recover after this, by the use of stimulants, as Colom. & opium, along with blood.

Some patients die without any previous coma, suddenly and unexpectedly. Their complicated with other diseases, it increases the danger.

It is also unfavorable, when there is no expectation.

It may also pass into other disorders, which may either prove fatal or may induce a return to health.
Diagnosis. Croup is a disease which generally speaking, is to be distinguished, pretty easily, from most other diseases, by the very peculiar sound of the breathing or cough; and also by the alteration of the voice.

When it is simple, and uncomplicated with other diseases, there is nothing to be observed in the throat, excepting a slight redness, and there is little or no pain on deglutition.

There are however some diseases with which it may be confused, to which may entraps the practitioner.

1. Croup is not likely to be mistaken for Syphilitic Maligna, or C. Pharyngiae, or indeed for any other form of sore throat, provided the Larynx is not implicated, the pain pain or deglutition in the two latter diseases, and also the absence of any very great disturbance of the function of respiration, are of themselves sufficient, without taking into consideration, the evident affection of the throat, sufficient to distinguish between them.

The difficulty is greater when the glottis is irritated by the particles of the concrements excrated in those diseases, when spasm of the muscles of the Larynx is excited, giving rise to a cough very similar to that of Croup, but with the appearance of the throat, or voice make the distinction sufficiently obvious.
2. A cough with the peculiar mufing character of the coughy cough is very frequently present during the early stage of Measles, prior to the eruption making its appearance, and which in some cases amounts to a slight form of it; but the appearance of the eruption, the cough soon becoming rattling, and the absence of coughy inspiration distinguishes this also.

3. From Brenchitis it may be suspected, by the suddenness of the attack, and by its severity; by its occurrence at night; by the sneeze, and by the absence of expectoration until late in the disease, by the atmose voice, and likewise by the seat of the uneasy sensations, which patients laboured under. Brenchitis generally refers to the stomach while in Croup it is of the Lungs. They complain either by words or gesture. These characters will also serve to indicate the separation of Crops on Brenchitis, which occasionally happens. The Stethoscope cannot always be used here, as the loud noise made by the lachrymation, obscures the signs of the various chest affection. Dr. Stokes has remarked that this is not always the case, particularly at the commencement of the disease, and likewise after the act of vomiting, when the lachrymated sound being left, the other sounds, the dry or moist sounds of Brenchitis and the expectoration of Phlegmia if present would then be heard.
Laryngitis is distinguished with more difficulty than any of the other...the distinction of the two has been founded chiefly on these circumstances. That the Cymanche Tracheitis, or Corp, which was first accurately described, is nearly confined to infants and young children, that it is unattended with difficulty of swallowing and that it is fatal chiefly by the formation of an inflammatory exudation on the mucous membrane of the larynx and trachea, whereas the Cymanche Laryngitis is described as attended with difficult deglutition, indeed often interfering in the C. Trachealis as affecting adults, and as fatal by the thickening of the membrane of the glottis, or by effusion of serum (or of pus) behind it, constituting the adhesion glottitis, not by the formation of a false membrane, nor by any change lower than the glottis."

5. Chronic Laryngeal and Tracheal inflammation, resemble Group very much in the kind of symptoms, as the hoarse voice, harsh dry cough, difficult respiration, etc., but they are distinguished by their slower progress, which is also hastened by the absence of the violent paroxysms towards death, so characteristic of Corp. They are also seldom seen in children, and by alteration of this part of the air passages already in...
fatal cases.

6. It is almost needless to speak of Asphyxy Cough as being likely to be confounded with Croup, as the symptom being so much different. Croup may occur during the course of Asphyxy Cough, but it is easily detected then.

7. Irregularities that have escaped into the larynx may give rise to symptoms, very much resembling Croup, but their effects are distinguished from it, by the sudden accession of pain or suffocation and the absence of febrile symptom, by the change in the seat of the uneasy sensation, made by altering the position of the patient, by the change of cough, and by the irregularity and completeness of the respiratory sounds.

9. Asthma frequently simulates Croup, in like manner as it simulates so many other diseases, but the history of the case, the sex and age of the patient, in general, do generally lead us generally to an accurate diagnosis in these cases.

There are other cases also, but they are of very rare occurrence and of little consequence.

Causes. This disease is generally produced by a combination of cold and moisture. Exposure to these circumstances appears certainly to be the most common exciting cause. Dr. Cheyne says the
attacks generally come on in the evening, after the
patient has been exposed to the weather, and he
also has remarked, that in the course of his practice,
very few cases came under his notice, which did
not originate in this way.

The countries in which it chiefly prevails, are those
in which great changes of temperature frequently
rapidly occur. It is much more common in the
Northern Countries of Europe, Switzerland, Savoy
of North America, than in more temperate
and warmer regions.

It occurs in this country, much more along the
Eastern than the Western shores.

The seasons in which it is the most prevalent are
the winter and spring months, more especially of
Eastern or North Eastern domiciles pursue.

Its favourite habitats are low moist flat lands,
what are called Cassie lands in Scotland.

The influence of Brucellosis is not shown, in the
case of the Case of Jaerie, where according to Dr
Bradford, the disease prevailed very much until
it was drained, and then the disease almost
disappeared, he makes the remark, "he.

plains in also make distinctive fruit, at various oc-
currence. Morbus — Thus situated on the farm.
of rivers. It is especially a disease of seaport towns, which is easily seen by comparing the numbers affected in Leith to Edinburgh.

The inhabitants of the lower parts of towns, are more subject to it than those living in more elevated situations: this is also to be observed in Edinburgh, where Dr. Alison says the greatest number of cases while he was connected with the Dispensary occurred in the Congate and Canongate, which are rather near the lowest situations in it.

Moisture appears to have a much greater influence in exciting the disease than any other cause, indeed most of the cases appear to be connected with a humid state of the atmosphere, or at any rate moisture in some form or other; but these are to explain to this rule. Dr. Alison having seen cases which occurred during the prevalence of frosty weather.

As illustrative of the great power of damp in exciting the disease, it has been observed that the children of washerwomen are more liable to it than the children of other people, in a similar station in life.

Dr. Alison has made the very curious remark in connection with the subject of moisture as a cause of the disease, that the greater number of cases...
among the lower orders in Edinburgh, happened on
the Saturday nights, which might on account of the
only one, on which the poor can find time, to
perform the necessary household cleansing. The
child being thus exposed, either while sitting
up, or sleeping, in a damp room, and no
doubt the other adjacent of cold being also pre-
sent; either from want of fires or from defective
state of the windows or doors.
It is exceedingly common after miscarriages.
It is also said to be much more prevalent in
the southern than the northern counties of England.
This may perhaps be explained by the greater
number of towns situated on coasts, in the former
than in the latter.
Age—Attacks of Croup are confined almost
exclusively to young children, especially between
the time of meaing's puberty; there are very
few cases which occur before meaing.
Dr. Copley has seen cases occur in infants
at the Covers of 3, 4, 5, 6 month old. Mr. Dyes
saw a case when the child was only a few
days old.
The most common periods for its attacks are
between the age of 1 or 2 years. Copley.
but it often occurs both sooner or later than those ages. Authors differ a good deal as to the exact time.

As a great number of cases occur between the ages of 1 & 2 years, it probably is connected with the change in diet. It frequently attack those who have been weaned early, and esp. those who have not been suckled by their own mother, but brought up by the hand. 

But some authors appear to think it more common amongst girls than boys, other and the more numerous party consider boys as more liable to its attacks, and upon the whole the latter appear to be in the right.

It does not appear that the sex of the individual predisposes in any other way than can be accounted for by the difference of habits - the habits of boys throwing them much more frequently in the way of the exciting cause - exposure to cold & moisture. I think it is that they more frequently contract the disease. 

Temperament. The nervous, sanguine temperament are said to predispose to the disease. The former to the hemorrhagic - the latter to the inflammatory form, or a mixture of the two.
A previous attack predisposes very much to another, and it is very apt to occur in some families more than others: but this is not to be wondered at, any more than the predisposition that exists to other diseases in different families.

The apparent predisposition is no doubt often due to similiar of constitution in the individuals of a family, and then being exposed to similar causes, as other members of the same family need.

Infection. Some seem to think that it may in certain circumstances from infection, but this also may originate from the same causes as above mentioned. Some authors say that it may become Epidemic, others deny it. It appears to have manifested an Epidemic tendency at different periods as in 1896. 6, and 7, when it spread over the South of Europe.

Although these may all be considered as predisposing cause yet sometimes they are the only existing cause we can detect.

It is apt to be excited by opposition to cold, slavery against the mine. It is also apt to superin upon other disease, as Bronchitis etc. it also seems upon suppuration of some discharge or eruption.
Pathology — in examining fatal cases of this disease, there are different lesions to be found. In those cases where death has occurred soon or in the disease, there is great vascularity of the mucous membrane of the Larynx, and it is often covered with mucus. The Submucous tissue generally much smaller. As a later period of the disease, there is generally a yellowish, or grayish white, albuminous matter thrown out, which adheres to the Mucous Membrane, and in some cases goes on to the formation of a false membrane, of the shape of the Larynx. Sometimes extending even to Bronchus. The Mucous membrane is not so much swollen after the condensation has been thrown out as it was before.

In some cases the matter thrown out is intermediate between pus & lymph.

In a good many cases of the Aphtous kind, there is no false membrane or condensation found, the symptoms in these being due to spasm almost alone. The False Membrane is at first a grayish white, it varies much in thickness, is thickest about the posterior superior part of the Trachea & thinnest about the Larynx. Glycolic i. its consistence &
Tenacity likewise vary much. It is almost always softened when it approaches the Bronchic, where generally it passes into a thick, glutinous, mucus. The membrane never becomes organized, but if the patient recovers, is got rid of by degrees by being separated from the neighbouring parts. Euphoriestia

The other morbid appearances met with are generally due to interposition of the function of inspiration, as Empysemia. Congestion of lungs, brain and Vapitization of the former.

These appearances will account for the symptom observed in the course of the disease.

Although Inflammation of the membrane is the chief cause of the symptom, yet still a great deal must be due to the Spasmatic contraction of the small muscles of lungs. The Cauterised muscle which shuts the aperture. When these muscles are inflamed, spasm is much more easily induced, in like manner as in other parts, as in spasm of the bladder, firm strictures.

The presence of the tunica membrane, also a place, another symptom in this disease, that of the child throwing back its head. This is the only posture in which it could be kept.
open; for if it were kept forward, the mem-
brane would be bent upon itself, and death
by apnem would speedily ensue.

The Collapse which takes place is due no doubt
to the imperfect state of the respiratory function.
So also, the lividity of coldness are to be ascribed
to the circulation & stagnation of imperfectly oxygen-
ated blood.

The other lesions observed as Empysemata are
desily understood when the state of the respiratory
apparatus is considered.

Nature - True Asthma is essentially an inflammatory
disease of air passages, especially the Trachea & Larynx.
But why it differs from the Catarrhal & Bronchial
inflammations, in the same part, it difficult to
discern.

Authors have differed much on this subject -
D. Copeland and others consider the peculiarity of
the product of the inflammation, as due to the drop
of albumen in the blood, but this does not seem
difficult to cause it; nor even it be said to
be due to the intensity of the inflammation as it occur,
partly abundantly in the asthenic form - Andral &
Fendri consider plastic inflammation of mucous
membrane as of a catatonic rather than an acute.
Kind.

Dr. Trotts thinks it due to the predominance of white tissue in the young subjects.

Dr. William thinks that it owes its peculiar character as results to its being more deeply seated than bronchial inflammation. He says, if on examining the air tubes of young subjects, we find in them, as in other parts, an abundance of the fine submucous cellular tissue, whilst the mucous membrane is more fine and less complex than it becomes in after life, when, from the continued irritation to which it has been exposed, its follicular apparatus attains its full activity, a development, the third toe in the young subject, abounds with the plastic materials of nutrition, which is more abundantly thrown out under the influence of inflammation than in the adult, yet as long as the inflammation even in young subjects, is confined to the mucous membrane, the disease is simply catarrhal or bronchitic, and its products mucous or purulent. But the inflammation may readily reach the action of a vascular submucous layer, and then it has the more fixed character of the inflammation of crops, the product of which easily transudes through the fine mucous membrane, and as in
analogous cases of serious inflammations, which is also seated chiefly in the subserous layer of the product in evagulable lymph.

Treatment. This differs according to the stage of the disease to which we see the patient.

The curative indications are briefly stated by Dr. Copland in his Dictionary of Practical Medicine, to be 1st. to diminish inflammatory & febrile action when present, and to prevent in these cases, the formation of a false membrane, or the accumulation of albuminous matter in the air passages;

2nd. when the time for attempting this has passed, or when it cannot be attained, to procure the discharge of these matter;

3rd. to subdue spasmotic symptoms as soon as they appear, and, 4th. to support the powers of life in the latter stages, so as to prevent the recurrence of spasms, and to enable the system to throw off the matter, exuded in the trachea.

Thus are few diseases, in which we are called upon to use antiphlogistic remedies, more rapidly or distinctly than in this.

The course of the disease is to rapid, and the amount of inflammatory effusion near the glottis, which may be fatal, so small, that the antiphlogistic remedies in a well marked case must be useless.
in rapid succession.

If we see the disease in its earliest stage, by the first
signs of invasion, bleeding should be employed without
hesitation. In the case of plethoric children or adults,
and it seems very frequently to arrest the disease very
readily, if employed within a few hours after the first
attack, but as very many of the patients are
young children, special bleeding might do as well
for most of them as generally for an adult, and
it must also be borne in mind that as there
is much expectoration generally in the latter stage
of the disease, it would not do to carry depletion too
far, seeing that it will require some strength to
get rid of it; indeed the inability thus arising to
do so has appeared in some cases, to have been
the cause of death.

The quantity of blood to be extracted depends of course
upon the age, strength of the patient, and also the
mode in some cases. There is some difference
amongst authors in both of these respects.

Dr. Alston recommends bleeding from the arm of a
child of 5 years or upwards; under that age leaking
appears most appropriate, which in these cases act
as a general evacuation, and are most advantageously
applied to the face, which prevents the child from
seeing them and thus they are more easily managed—

2 leeches provided they bleed sufficiently and are considered by him as a sufficient evacuation for a child of 6 months; 3 for one a year old; and an additional one for every year of the child's age up to the time when resection is usually employed; if the child be a strong phlegmatic one, one may add one for each additional 6 months. Dr. Payne says that for a child under 2 years, it should not exceed 5 ounces, which is considered by Dr. Halton as a large bleeding.

Dr. Copland considers that the loss of blood which these patients may bear with safety to be a little more than 1 ounce for every year of their age. He recommends local bleeding in town children and general in country ones.

Dr. Payne recommends resection to be used (in the regular cases of very young children) ten minutes after the administration of an emetic, by which means a powerful impulsion is made with little loss of blood—

as vomiting followed by painting is produced by the loss of a small quantity of blood, the painting also lasting some time;—a repetition of the bleeding is recommended by him in severe cases after the
..of an hour or two, leeches as well are to be applied of necessity.

As to the application of leeches, I best recommend them to be applied to the nearest vicinity of the affected membrane, and of course the larynx would naturally be selected for this purpose, if it were not for the great difficulty there would be in regulating the amount. I apply a pressure which could scarcely be tolerated in these cases.

Dr. Copland considers that cupping between the shoulders, or at the nape of the neck, or leech applied to the sternum would be preferable to laceration, at least in town practice.

Bloodletting must be followed by other remedies or else little benefit will be derived, as it is only by a combination of remedies that one must expect to overcome this disease.

Next to bloodletting, vomiting appears the most bene
valent remedy. The good effects of vomiting are well known in these districts, where the Corp
es is apt to prevail as in Cape lands, so that
many of the inhabitants keep a vomit in the house, which they administer to the child on the first appearance of the symptoms, before sending for a medical man.
The great relief which follows the administration of an Emetic, makes us naturally think that it is spasmatic.

A purgative administered after this often puts an end to the disease, no other treatment being required. A full dose of the Emetic is generally required to produce its full effects as the attention of the patient is so much taken up with the dyspnea, as probably not to have time to notice the nauseating effects of the medicine.

The best of Emetics in these cases appears to be the Tarar Emetic, which seems to have great power over inflammation of the mucous tissues. Dr. Cheyne first recommended this in 1801 and he stated since in 1832 that he had found no other remedy worthy of confidence in the second stage of Cord. This is given by him to a child 3 years old, in doses from a quarter to half a grain every half hour, until dejection is produced, and then after two hours repeat it as long as the inflammatory symptoms continue or the patient strengthens much bear it.

Dr. Lamb even places it alone without any fear of efficiency.

Specimen: This is also given in doses of a tea
Spontaneous every 5 minutes until vomiting is produced. But the Twitcher Emetic is better; given in doses of 1/8 of a grain every 5 minutes; it should always be given pretty largely diluted, as unless this is done, it is apt to cause irritation.

Dr. West thinks it better to resuscitate according to circumstances, the act of vomiting from time to time rather than keep the patient in a state of constant faintness or nausea, which might mask the progress of the disease, to a fatal termination.

He adduces in favour of the Emetic over the laudanum dose, in addition to his own experience, the result of that of Dr. Valley, who in 53 cases of true Crook's fever Antiproxy or Fucacancer in full dose in 31 cases, and 13 recovered, while in 22 others, where these were not so largely used all died but one.

When perfect relief does not follow the use of the emetic, Dr. Cheyne recommends a powder of Saline and powders - to be repeated every 3 hours. A dose of castor oil to be given if this does not affect the bowels after a third dose.

The warm bath is another remedy which ought not to be neglected; about 96° or 98° Fahrenheit is the proper temperature. This should be used...
especially when there is a tendency to sweating, just after something has been produced in the best time, let the patient remain in for 10 minutes, of when taken out hot, have dry, and put him to bed immediately. Great relief follows this treatment, which lends additional strength to the supposition that great part of the most distressing symptoms are due to spasm.

Calomel is another remedy which is largely employed by some in the treatment of Croup. It was a favorite remedy of the late Professor Hamilton of Edinburgh. Indeed it is the medicine which is still most used as a purge in this affection.

It appears to have been used by many with the intention of arresting the inflammatory process in the same manner that it is supposed to do in adhesive inflammation of the serous membrane. But no steps ought to be taken on the peculiar influence of Calomel in this disease, considering how quickly the tendency is proved out and the membrane formed; it appears unlikely that its specific effects could be so speedily manifest as to arrest its progress. Dr. Alison says he has used other purgatives, such as Febrifuge, with the same results as followed the use of Calomel.

Still as the Calomel has the greatest favour amongst.
Practitioners, we may give it, as it is easily got down, carefully however matching its effects.

But after all, the Antimony appears to be the best remedy as its effects in full doses of restraining inflammation of the mucous epithele are well known.

There are some cases where vomiting is produced so easily, as to render all the treatment by preventing other medicines being got down; in these cases Galnate as a purgative is most easily retained in the stomach.

If the symptoms do not arise, the treatment with Antimony should be continued during the height of the disease in small doses and not so frequently, until it affect the bowels; if after full vomiting the vomiting does not occur.

If the symptoms are relieved, and the action of the remedies still goes on, we may use stand injections, with a little Aperitif.

When all the symptoms are fully developed, that is, in the second stage, bleeding is not so well borne, and indeed is not so effectual. So that great caution is requisite if this be employed and this can only be in early part of second stage. But one must still endeavor to purge his first in chietrin. 
After the sedation has taken place one must try to fulfill the second or third indications, viz., the discharge of sedation, & suppression of spasm. These are still best attained by the amphitropic remedies mentioned before.

The Tarax Emetic produces the expectoration of fluids of the membrane & mucus which were clogging up the tubes; this may be used until it induces great expectoration, but when sucking of the pulse &c are coming in, it should be forthwith drawn, at least in a great measure, when the inflammatory symptoms have subsided, one may then make use of remedies not so debilitating, as the Tarax Emetic, such as Benign of Syphilis, Spearmint Wine, Camphor, Ammon., etc. when these remedies fail to excite vomiting, tickling the Pharynx with a feather sometimes produces it.

To relieve the spasm, the warm bath, along with the emetics, will act as the best anti-spasmodic.

During this and the preceding stage, the inhalation of strong opium appears to be beneficial, with the addition of Camphor, which are useful to promote expectoration.
Opiums require great care in their administration, the best is Dover's powder.

In the last stage of the disease, stimulants are of little value, with more aperients to join the patient, the best chance of recovery seems after the delirium or coma may have set in, although the recovery is not always the case.

Stimulatives have been used with the intention of causing the discharge of the false membrane from the pharynx, and according to Dr. Jackson with good effect in 2 or 3 instances. A camphorated spirit of turpentine having been used for the purpose.

Dr. Grasse, in his clinical lecture, recommends a new method of treating this disease, which was proposed by Dr. Lehman of Lowans. It certainly is a very simple remedy, and very easily made use of. The application of a sponge with hot water as hot as the hand can bear, placed immediately over the larynx and trachea, as soon as the symptoms of cough show themselves, it must be continued for about 20 minutes, until it produce a visible reddening of the throat. There is a tendency to perspiration, which must be encouraged by liberal administration. A great change soon takes place.
The patient falls asleep again and awakes next morning free from all bad symptoms. He says he has repeatedly been visited by the disease on this plan and with the most uniform success, but still the case it is not usual to expect full recovery or bleeding; as it is only applicable to those seen at the very onset of the disease.

The only remaining remedy which we can try is Tracheotomy, which is seldom employed in children, but often in adults, as in the latter the trachea are not so much involved as in the former.

Tracheotomy, is a remedy which is seldom successful in this country, and indeed it has only been considered justifiable as a last resort if the cases in this country are only part of a more general bronchial inflammation, but in France it has been much more successful. It has become a regular practice in the cases in that country begin in the summer.

Dr. West says that an extensive false membrane is more common in this country than in London. In London often beginning as Diphtherite and in those cases there is the best chance for Tracheotomy.
The objections to the operation are, that probably the membrane has extended to the bronchii, in which case the measure can be productive of little benefit; and also its recurrence along with bronchitis.

It is only attention to the mode of breathing and the indications furnished by the stethoscope that we can judge of the success of this treatment—of course of the air cells are involved little good is to be expected from it.

Prophylactic Treatment—The chief of these measures is removal from the district where crop is likely to be generated, change of air or scene, sponging the chest, arms and in fact the whole body with cold water, and then rubbing themselves dry with a coarse towel or making use of the shower baths, wearing flannel next the skin, and careful avoidance of cold or moisture.

Children should never be exposed to the north easterly winds in this country.

The diet should be light and nourishing. When one child of a family residing in a damp situation is attacked, the rest of them should be removed to a...
Green's Land of Eden

not mentioned

Boeinuffman Sala
healthier air.

Gelis recommends an issue of some form or other for those children who are liable to attacks of it, as he says he never saw a child who had severe or other cutaneous affection attacked with it, while the cutaneous eruption was fully developed, even when the Croup was prevalent.

During convalescence, change of air as soon as it can be done, is especially beneficial and great caution is required, in order to prevent a relapse. In winter or spring months especially, the patients ought to be kept in a moderately warm apartment.