VICTIMS OF PNEUMONIA.

THE GERMS OF THE DISEASE IN THE AIR WE BREATHE.

How the Deadly Microbe Attacks the Lung—Its Short and Swift Career—Precautions Which Should be Observed by All.

The death records during the long months of the Canadian winter, show human life has no more active or more deadly foe than pneumonia. It is a familiar saying among Canadians that old people die in winter and little children in summer. Of the host of the aged who finished life's journey, a large percentage are stricken down in January, February and March, those being the months in which the pneumo-microbe creates greatest havoc.

IT IS A GERM DISEASE.

Comparatively few people are aware that pneumonia is a germ disease, caused by a distinct species of microbe and in no way to be confounded with a severe cold or inflammation of the lung. In winter the atmosphere contains great numbers of these microbes which are inhaled by all classes, the strong throwing them off by reason of their constitutional vigor and the weak falling, in two many cases, victims to the disease. There is little doubt that thousands of disease germs of all kinds are inhaled daily and thrown off without injury by strong organisms.

SYMPTOMS OF THE DISEASE.

Once the germ of pneumonia enters lungs suitable for its operations, it begins its work. The symptoms of this disease are well marked, and no physician experiences much difficulty in diagnosing a case of pneumonia. The first manifestations is a marked chill with rigor and shivering, lasting from twenty minutes to an hour. There is an acute pain in the side affected which grows in intensity as the disease advances. In ordinary cases there is a cough and the sputum thrown off is tinged with blood and very tenacious. The temperature goes up to 105 or 104 and continues so during the course of the illness, which is about a week or ten days, when it suddenly falls. This sudden fall is called the crisis of pneumonia, and is quite a distinct feature of the disease. As soon as the crisis occurs the patient changes from a condition of severe pain to one of comparative comfort and proceeds to get well. The cause of all these manipulations, of course, has been the pneumonia microbe which causes an inflammation of the lung or lungs by bringing about an exudation of serum which coagulates within the cells, closes them up and renders the lungs totally useless for respiratory purposes. One lobe of a lung may be affected, or two, or the whole or both lungs.

DRUNKARD'S PNEUMONIA.

Especially is pneumonia hard on those who have been addicted to strong drink. Statistics of death in pneumonia would furnish one of the most striking temperance lectures on record if all the facts were known. The very young and the aged succumb readily enough to this fell destroyer, but the man of strong frame goes down in the pride of his strength if he has undermined his constitution by alcohol. So commonly has this been observed that a very malignant form of pneumonia which has been frequently noticed in cases of inebriates has been termed "drunkard's pneumonia." In this malignant form, there may be little or no coughing; the temperature will show but little rise; but the pulse is usually bounding. The heart is speedily affected and death results, as it does in most cases of pneumonia which prove fatal from endocarditis, or an inflammation within the heart.

DRUGS OF LITTLE AVAIL.

Pneumonia is essentially a self-limited disease. It runs a fixed course and drugs have little or no effect in checking its career. The headache, the pain in the side, the high fever and the pleurisy continue for about a week. Then if the patient does not die the temperature takes a drop and he gradually recovers. Where a doctor is most useful is in watching the action of the heart, preventing complications, and easing the pain. A physician should always be called as soon as possible. The patient should be warmly wrapped up, but should be well supplied with fresh air. Stimulants are useful, and a useful method of treatment in the past has been by poulticing the chest. Of late cold water applications have given good results. But people should never attempt to doctor a case of pneumonia. Send for the family physician at once. The heart must be carefully looked after, and every person doesn't understand the action of digitalis and morphia. Inhalations of oxygen, if properly administered, may be of great use.

A FIELD FOR EXPERIMENT.

The curious phenomenon of the sudden fall in temperature or crisis referred to above has been the cause of many theories and experiments among medical men. As the disease seems to limit itself it was thought that the microbe threw out a substance which neutralized its own ptomaine or poison. ither this is the case or else the human system manufactures an antitoxin which neutralizes this poison in the methods as it manufactures the antitoxin in the new diphtheria cure. The medical men argued that as the crisis was caused by a serum hostile to the poison of pneumonia, that crisis might be brought on earlier in the disease if the serum were injected under the skin of the patient. So they tried injections from the serum taken from convalescent patients who had reached or passed the crisis. So far, however, these experiments have resulted fruitlessly and pneumonia is still one of the deadliest of acute diseases and but little amenable to treatment.

DEATH RATE IS HIGH

The percentage of mortality in pneumonia is very high. From statistics compiled it is found that it runs from twenty to thirty per cent. of all cases. In Canada the rate would be about twenty per cent. In southern countries the rate is much higher, ranging from twenty-eight to thirty per cent. The disease is infectious to a certain degree and is often noticed in veritable epidemics. The germs would seem to form little populous centres of their own and not infrequently two or more members of a family are stricken at the same time.

HOW TO AVOID PNEUMONIA.

Since treatment affects the progress of pneumonia to such a small degree and as the death rate is so high it is obvious that all precautions should be observed to prevent an attack. Although it is a germ disease and not to be confounded with a cold, it has, nevertheless, been observed that it is usually associated with exposure to cold and damp weather. Old people should be particularly careful to wrap up warmly when going out, and to avoid all sudden draughts and chills. Exposure to severe cold should be avoided. As an organism in good physical condition will throw off the germs, it stands to reason that all should strive to keep up the tone of the system by observing the rules of health which are now sufficiently known to all. Cleanliness, fresh air, exercise and butcher's meat are the means to this end. It has moreover been frequently noticed by the observant physician that people who worry greatly are particularly subject to the disease. Worry of course lowers the vitality and indirectly makes a man reckless so that he is not as careful to avoid exposure as he would be ordinarily. This is a probable explanation of the susceptibility of excitable people to pneumonia. As for drinkers it would indeed be well if they drew it mild at least during the winter months. Let pneumonia get its grip on a heavy drinker and he is usually a dead man in three days. There is little or no hope for him. When it is considered that drinkers who keep late hours are particularly exposed to cold it will be readily conceded that King Alcohol plays directly into the hands of pneumonia. If, however, people make an effort to keep up their health, and observe regular hours, there is not great danger from this disease. If people were to make some little effort along this line undoubtedly the death records of pneumonia for the season 1894-5 would look meagre as compared with those of former years.

CARE OF MACADAM ROADS.

Instructions Issued by the Road Improvement Association of London, England.

Improved roads are becoming so common in various parts of our country, that the following instructions, issued by the Road Improvement Association of London, England, for the guidance of their roadmen, will be of great service to all who have to do with this class of roads; for one thing is sure, a Telford or Macadam road needs the best of care to be in good condition, and unless this care is given them they soon get out of order, and the work of repairing them is expensive.

1. Never allow a hollow, a rut, or a puddle to remain on a road, but fill it up at once with chips from the stone heap.

2. Always use chips for patching and for all repairs during the summer months.

3. Never put fresh stones on the roads, if by cross-picking and a thorough use of the rake the surface can be made smooth and kept at the proper strength and section.

4. Remember that the rake is the most useful tool in your collection, and it should be kept at close hand the whole year round.

5. Do not spread large patches of stone over the whole width of the road, but coat the middle or horse track first, and when this has worn in, coat each of the sides in turn.

6. In moderately dry weather and on hard roads always pick up the old surface into ridges six inches apart, and remove all large and projecting stones before applying a new coating.

7. Never spread stones more than one stone deep, but add a second layer when the first has worn in, if one coat be not enough.

8. Never shoot stones on the road and crack them where they lie, or a smooth surface will be out of the question.

9. Never put a stone upon the road for repairing purposes that will not freely pass in every direction through a two-inch ring, and remember that still smaller stones should be used for patching and for all slight repairs.

10. Recollect that hard stones should be broken to finer gauge than soft, but that the two-inch gauge is the largest that should be used undor any circumstances where no steam roller is employed.

11. Never be without your ring gauge; remember Macadam's advice that any stone you cannot easily put in your mouth should be broken smaller.

12. Use chips if possible for binding newly laid stones together, and remember that road sweepings, horse droppings, sods or grass and other rubbish when used for this purpose will ruin the best road ever constructed.

13. Remember that water-worn or rounded stones should never be used upon steep gradients, or they will fail to bind together.

14. Never allow dust or mud to lie on the surface of the roads, for either of these will double the cost of maintenance.

15. Recollect that dust becomes mud at the first shower, and that mud forms a wet blanket which will keep a road in a filthy condition for weeks at a time, instead of allowing it to dry in a few hours.

16. Remember that the middle of the road should always be a little higher than the sides, so that the rain may run into the side gutters at once.

17. Never allow the water-tables, gutters and ditches to clog up, but keep them clear the whole year through.

While all of the above rules are important and embrace the principles of good road adminstration in a small space, especial force should be attached to rules 14 and 15, as upon the observance of these two rules depend in a great measure the usefulness of all Macadam and Telford roads. Yet how frequently do we see these best of roads made offensive by the neglect of these simple principles. In too many instances the surface is allowed to become foul with horse voidings and an accumulation of dirt and dust, are seldom scraped or cleaned, and being constantly sprinkled, the surface, which should be hard and clean, becomes foul with a sticky, nasty mud two or three inches deep.

THE WEEK'S NEWS.

CANADA.

There is a demand for dwelling houses in Owen Sound.

George Hoover, a notorious bandit, has been jailed at Brockville.

Jonas Knechtel, a prominent architect of Berlin, Ont., is dead from typhoid fever.

The late John T. Warrington, jr., of Belleville, left an estate valued at $26,000.

The assessed value of property in London, Ont., is $15,328,710; $250,700 higher than last year.

The Montreal Exhibition Company has endorsed the project of holding a World's Fair in that city in 1896.

The Kingston Dairy school was opened on Thursday, Professor Robertson, Dominion Dairy Commissioner, giving the opening lecture.

Przhodda and Happka, the two Poles charged with a vicious attack on Mr. Wildfong, of Berlin, Ont., some days ago, have been committed for trial.

The insurance companies in Winnipeg, which raised the rates twenty-five per cent, on account of the recent fires, have restored them to the old figure.

The following telegram has been received by Hon. Mr. Bowell: "The Canadian Pacific Telegraph Company will be pleased to transmit free all telegrams in connection with the proposed national subscription. (Signed) C. R. Hosmer."

The committee on the national testimonial to Lady Thompson consists of Hon. Messrs. Bowell, Ives and Angers. Mr. Foster is treasurer. Mr. Bowell received a letter from a Montreal gentleman subscribing $1,000 to the fund.

The Quebec Treasury has received a cheque for fifteen thousand dollars as an inheritance tax on the late Duncan McIntyre's estate in that province. The estate in the Province of Quebec was appraised at $1,045,616.10, but as one-half belongs to Mrs. McIntyre, the succession duty of three per cent. only applies to the balance.

Mr. John Whyte, of Mitchell, Ont., has had about forty sheep stolen out of a herd of about five hundred, and on Thursday night James Shane, a farmer living about a mile and a quarter from Mitchell, was arrested on the charge of stealing the sheep, of which about twenty-five have been recovered.

Joseph Truskey was hanged on Friday at Sandwich Ont., for the murder of Constable Lindsay at Comber, Ont., on January 20th last. Truskey committed the crime in revenge, Constable Lindsay having had him arrested for cruelty to animals in October, 1893, of which charge Truskey was found guilty and fined sixty dollars and costs.

The Rev. E. J. Fessenden, rector of Trinity church, Chippawa, Ont., has commenced an action and issued a writ to recover his salary as the rector of that congregation since 1891. The vestry passed a resolution in 1891 stopping Mr. Fessenden's salary, after their request to have him removed had been refused by the Bishop, but Mr. Fessenden continued in charge, being supported by a few of his faithful parishioners.

GREAT BRITAIN.

Lord Brassey is spoken of as the coming Governor of Victoria, Australia.

The Bank of England's rate of discount remains unchanged at 2 per cent.

Glasgow has one underground railway in operation and two more under construction.

A despatch from London says a detective has been specially told off to protect the Queen.

The business troubles at St. John's Nfld., have not had any effect on London commerical circles.

The Prince of Wales will go to Cannes in January to race his yacht, the Britannia, in the regatta there.

During the recent floods in the Thames valley soup was made daily at Windsor castle for the sufferers. The inundation was the greatest since 1742.

It is stated on good authority in London that the object of Sir William Van Horne's visit is not financial, but entirely for the benefit of his health.

At the request of Sir Charles Tupper, Mr. William Reynolds-Stephens and Mr. Joseph Whitehead each took a plaster cast of the face of the late Sir John Thompson for the purpose of making a bust.

Serious depression prevails in the English alkali trade. The United Alkali Company's works have been shut down and several thousand men are idle.

In view of the agitation concerning the transatlantic mails, Galway is pressing her claims as offering the best, the safest, the cheapest, and the quiskest route to the new world.

The authorities of Scotland Yard say there is no truth in the statement regarding the visit to England of a well-known Irish-American extremist, with the view of reviving Fenianism in England.

On Wednesday in Chester, with full choral service, Prince Adolphus of Teck was married to Lady Margaret, the third daughter of the Duke of Westminster. The attendance was very fashionable, the dresses elegant, and the gifts magnificent.

UNITED STATES.

A heavy snowstorm has crippled railway business at Carson, Nevada.

The new United States cruiser Minneapolis has been placed in commission.

Adjutant-General Josiah Porter died in New York on Friday night, of apoplexy.

Lewis T. Ives, a well-known lawyer and artist, of Detroit, died on Friday.

Daniel M. Robertson, a wife murderer, was hanged at New Bedford, Mass., on Friday.

The Boston city elections on Tuesday resulted in an overwhelming Republican victory.

The charges of cruelty against the officials of the Elmira, N.Y., reformatory have been dismissed.

Benedict & Fowler New York lumber dealers, have assigned. Liabilities, $40,000; assets, $20,000.

Samuel C. Seely, the New York Shoe and Leather Bank defaulter, is now in Ludlow street jail in that city.

Eugene V. Debs, the leader of the grea A. R. U. strike at Chicago, has been sentenced to six months' imprisonment.

A Washington despatch to a Buffalo paper says President Cleveland is a very sick man. Gout is said to be the malady.

The Commercial Bank at St. Joseph, Mo., has gone into the hands of an assignee. Assets, $320,000; liabilities. $270,000.

President Cleveland has issued an order placing the entire internal revenue service under the provisions of the civil service law.

Deveaux College at Niagara Falls is said to have been closed owing to an outbreak of typhoid fever in the institution, and over 100 students sent home.

A lone highwayman held up the stage eight miles from Fort Thomas, Arizona, on Friday night, and secured the mail pouch, supposed to contain a large sum of money.

A number of printers who left Winnipeg recently on account of the introduction of machines have been arrrested in Grand Forks under the alien labour law.

F. S. Fogle, a fireman on the Pennsylvania railroad, was blown from his engine near New Florence by the gale which raged Wednesday night, and was killed by the fall.

John Garvey, the tramp who entered the Astor mansion on Fifth avenue and took a sleep in one of the beds there, has been sentenced to one year's imprisonment in the penitentiary.

Fifty-two indictments against ex-county officials and members of the Board of Supervisors have been returned by the grand jury of Sioux City, Iowa. The county has been robbed of $200,000.

David G. Spragg, an insane man, living near Ridgeway, Mo., on Tuesday evening killed his wife and two children, fatally wounded his two step children, and then committed suicide.

The clay sewer pipe companies of the United States have combined, with headquarters at Pittsburg. They will act in harmony with the Akron, Ohio, trust, and it is said prices will be advanced.

By a collision of cable cars in the Washington street tunnel, Chicago, on Wednesday evening, one man was killed, seven people seriously injured and others bruised. The cars took fire and there was a general panic.

Before the Lexow Committee in New York on Friday Police Captain Creedon made a confession, implicating a number of the higher police officials. His story caused an immense sensation, and the investigators warmly congratulated him upon his straightforward stand.

In the United States House of Representatives on Thursday Mr. Dingley asked for information as to the working of the Behring Sea regulations for the protection of seal life. He believed that the three hundred thousand dollars of expense annually incurred by the United States benefits Canadian sealers alone.

GENERAL.

Late statistics show 148,669 more females than males in Sweden.

Prince Hohenlohe, the new German Chancellor, is ill and confined to bed, from a cold.

A conflict has arisen between Brazil, the Argentine Republic and Uruguay on the subject of quarantine.

Father Donza, director of the Vatican observatory, died on Friday of apoplexy, after an audience with the Pope.

Unusually severe and repeated earthquake shocks have been experienced in Rangoon, British Burmah.

Berlin and Vienna, which are four hundred and thirty miles apart, are now connected by telephone.

A report that Field Marshal Yamagata, commander of the first Japanese army, was dead, is officially declared to be untrue.

The Bourse Gazette, of St. Petersburg, says that the new Russian loan of 15,000,000 roubles has been subscribed for 40 times over.

In Prague there lives a Jewess named Sali Rudolf who has attained her one hundred and fifth year. She is in humble circumstances.

It is reported that the Pope is suffering from catarrhal symptoms, and that he has been forbidden by his physicians to leave his private apartments.

The King of Italy has conferred the knighthood of the crown of Italy on several members of the Italian colony at Salonica. Six of the new knights are Jews.

The budget for 1895-96 was presented to the Italian Chamber of Deputies on Thursday by Signor Sonnino, Minister of Finance. It shows a deficit of seventy million lire.

It is expected that the German Socialist Deputies who remained seated in the Reichstag when cheers for the Emperor were called for will be prosecuted for lese-majeste.

The Dunkirk (France) Chamber of Commerce, in response to an appeal from Montreal, has decided to do everything possible to establish a direct steamship line between France and Canada.

A British resident in Pekin says the feeling against foreigners is increasing in bitterness, and he feels convinced that when the Japanese come within sight of the capital every foreigner will be massacred.

The Pope is said to be anxious to bring about a union of the Western Churches, and he intends drawing together at the Vatican a number of Catholic prelates of England and America, in order to confer with them as to the best means of realizing his hopes.

The Court of Enquiry held at Auckland, New Zealaud, has found that the steamer Wairarapa, which was wrecked on Great Barrier island in October, with the loss of more than eighty lives, was lost through the fault of Captain McIntosh, who was among the drowned.

In an interview on Friday in London, Mr. W B. Perceval, the Agent-General of New Zealand, said that New Zealand is most anxious for direct steamer and cable communication with Canada, and if the Imperial Government does her share New Zealand will not be backward. Mr. Walter Pearce, the Agent-General of Natal, said he thought there were many obstacles in the way of carrying out the Earl of Jerseys proposals.

THE BRAZILIAN ANACONDA.

It Could Devastate the Country if it Had More Fierceness.

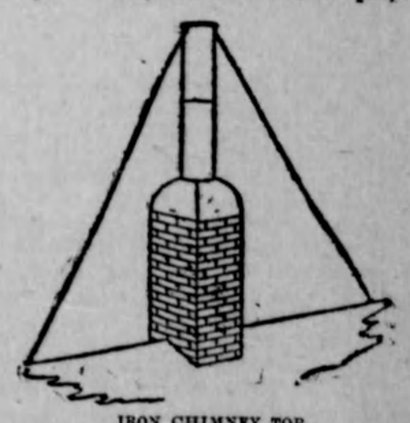
Whatever the possible dimensions of the Indian and African boas, there can be no doubt that the anaconda of Brazil grows to a size which would make this species as much the scourge of the Brazilian forest and of the waterways of the Amazons as the shark is of tropical harbors, were its ferocity equal to its strength and astonishing power of speed, whether on land or in water. It could kill, and probably devour, every creature, including man, which is found in the Amazon delta.

The late Mr. Bates, in his eleven years spent in the Brazilian forests, saw and heard more of the habits of the anaconda than most travelers, though, like other great serpents, the individuals of this species are so little common that their appearance in any one district is too unfrequent to make a special study of their habits part of the day's work of a busy naturalist. Bates' first personal experience of the creature shows how impossible it is to avoid the python by the ordinary means of isolation sufficient to keep other dangerous creatures at a distance. He was at anchor in a large boat, in deep water, in the port of Antonio Malagueita. An anaconda swam out to the boat, lifted its head from the water, broke in the side of a fowl house on deck, and carried off a couple of fowls. It was found that this snake had been stealing ducks and fowls from this part of the river for months, so a hunt was organized, miles of river bank were searched, and the serpent at last feund sunning itself in a muddy creek and killed. It was "not a large specimen, only 18 feet 9 inches long." But Mr. Bates measured skins of anacondas which were 21 feet in length and 2 feet in girth, and he adds, "there can be no doubt that this formidable serpent grows to an enormous bulk, and lives to a great age, for I have heard of specimens having been killed which measured 42 feet in length, or double the size of the largest which I had the opportunity of examining."

We must add a correction here. They were double the length; but the size of these great reptiles, like that of fish, increases enormously with every addition in longitudinal growth. A snake 20 feet in length would be probably four times the weight of one 10 feet long, and the bulk of a 4-foot anaconda would approach that of the largest crocodile. Since the publication of "The Naturalist's Voyage on the Amazons," an anaconda of 29 feet has been brought to the Natural History Museum at South Kensington. A neighbor of Bates' in Brazil, nearly lost his 10-year-old son by the attack of an anaconda. He had left the boy in his boat while he went to gather fruit, and on his return found him encircled by the snake, whose jaws the father seized, and actually tore them asunder.

Smoky Chimneys.

Few things will raise the ire of the housewife or kitchen girl quicker than to be obliged to burn green wood, or to endure the evils of a smoky chimney. But the chimney affair should be easily disposed of. Most smoky chimneys are not built to the proper height, and it is usually the kitchen chimney that fails to give a proper draft to the stove, or discharge the smoke at the top in a satisfactory manner. The revolving patented appliance to be attached to the top of chimneys do not always give satisfaction, and to obtain a proper



IRON CHIMNEY TOP.

draught the chimney must often be extended to the level of the ridge of the main building. This renders in most cases a structure of brick quite impracticable, hence resort must be had to a galvanized iron attachment that any tinsmith will furnish. (See cut). It should set down over one course or layer of bricks. Put it in place some still day, first coating with mortar the sides of brick to be covered by the hood, that a close joint may be had. If not more than two lengths of pipe are added two stays of wire attached to the ridge will prove sufficient; if the distance is greater, use three stays which will hold it securely. In building a house guard against any trouble of this kind by having the chimneys all extend to as near the same height as possible.

HIS ESCAPE MIRACULOUS.

Nothing But the Bicylist's Agility Saved His Life.

Toronto, Dec. 16—The corner of Young and Richmond Sts. was the scene of a collision at noon to-day between a bicycle rider named Hall and a vehicle. The onlookers were terrorstricken, when to their surprise the nimble biker was seen mounton one of the prancing steeds, leaving the cycle to the mercy of the wheels.

Both at Work.

Mrs. Strongmind—"Here I'm working night and day for the advancement of woman, but I'd like to know what use you are in the world."

Mr. S.—"I am working for the emancipation of man."

"Eh?" How?"

"I am trying to make cotton cheaper."

"The idea! What for?"

"So that even the poorest man can afford enough to stop his ears with."