

Health Department.

Milk and Infectious Diseases.

An outbreak of typhoid fever in St. Pancras, London, has been traced to the milk supply directly, and indirectly to a sycamore tree. During August there were 223 cases of the epidemic within a limited area. The sanitary officer conducting an investigation began by making a map of the district showing the distribution of houses where there had been sickness. He was able at once to discard two theories of infection, namely, the condition of the Regent's Canal and contaminated water from the mains, and speedily to find an adequate cause in the milk supply. Out of 431 persons attacked during the summer, 368 were known to obtain milk from one dealer and the remaining 63 might have done so indirectly. Houses supplied by other dealers escaped; and in families which depended upon the fatal milk-cart, those who drank milk were attacked, while those who preferred beer did not have the fever.

The dealer obtained milk from five farms, but the houses in St. Pancras in which the fever had occurred had been supplied mainly from the same farm. This was in St. Albans; and as direct evidence that this was the source of infection, the sanitary officer ascertained that certain porters in the dealer's employ were attacked after drinking the milk, that there were additional cases on the farm itself, and that houses in St. Albans supplied with the same milk were also infected. The investigation having been narrowed down to a single farm, the water supply naturally fell under suspicion. The milk cans and pails were found to be washed every day in a dairy with water obtained from a well adjoining a cesspool. A sycamore tree stood between them, and its roots probably gave opportunity for the percolation of leakage from one into the other. This was the most satisfactory explanation which the sanitary inspector could give of the outbreak of the fever.

It is by no means certain, however, that the milk was not infected by the prevalence of the disease at the farm. A dairyman in Dundee, for example, who kept his supply of milk in a room where his little boy lay prostrated with scarlet fever introduced the disease in various households, until there were seventeen cases and four deaths. Instances are constantly arising where infectious disease is directly communicated by means of milk that has been directly exposed to contamination in dairies or farm-houses. It is possible, therefore, that the sycamore tree had less to do with the spread of contagion than the inspector supposed. The relative situation of the cesspool and the well, however, naturally suggested the final step in his series of ingenious deductions.—*Tribune*.

New Uses for the Thermometer.

Being called to prescribe for a patient living in the hills above Keyport, who had long been afflicted with epilepsy, and whose mind was now somewhat impaired, I noticed a remarkable pallor of countenance, and that the surface of the body was very cold to the touch, so produced a clinical thermometer to ascertain the temperature. The young man evidently looked upon it as a part of the treatment, and, further impressed by the admiring awe of his relatives, closed his lips upon it with as pious a care as though it had been Tyndall's prayer-gauge, and speedily seemed oblivious of all earthly things. So rapt was he that when I went to withdraw the thermometer he gave a start like one rudely assailed. "How did it affect you?" queried I. "Very well, indeed," he replied: "I think it has made me feel much better." And then, raising his hand with an air of benediction, he added: "It had such a quieting influence." An hour afterward I visited a young domestic in another family who was convalescing from a mild attack of typhoid fever, where the temperature had ranged from 100 to 102 degrees for several days. While here I related the above incident to her employers, who laughed heartily, but the girl, with a look of

scornful superiority, cried out: "Pooh! he mustn't ever have seen one before! Why, I have had two at a time in my mouth, and thought nothing of it." "Why was that?" asked I. "When I was on Randall's Island." "Yes, but why? what were two used for?" "Because—because," blurted she in confusion, "my fever was so high they couldn't tell it all on one."—*Medical Record*.

Propagation of Diphtheria by Chickens.

It has been known for some time that pheasants, pigeons, turkeys, domestic fowl, and the like were liable to be attacked by diphtheria. The *Wiener Allgemeine Medicinische Zeitung* informs us that Prof. Gerhart of Wurzburg has carried out a series of observations for the purpose of determining whether the disease may be communicated by this means, and has come to an affirmative conclusion. In September 1881, 2,500 fowl were sent from the neighborhood of Vorena to Neeselshausen, in Baden, where there is a great fowl-rearing establishment. Some of them must have been affected with diphtheria before they started, and in the end 1,400 fowl died of it. In the summer of last year 1,000 chickens were hatched from eggs, collected from many different places. Six weeks after the birth diphtheria manifested itself among the young chickens, and so badly that in a short time they all died. Five cats that were kept in the establishment also became ill of the same malady and died. A parrot that hung in a cage in the house was also attacked, but recovered.

Last November an Italian hen, which had been "painted" about the jaws with carbolic acid by the keeper, bit the man's wrist and foot. Presently he became ill with a smart fever, considerable swelling at the wounded parts, and all the symptoms of traumatic diphtheria. His recovery was very tedious. This was not the only case of the transmission of the disease to men. Two-thirds of all the laboring persons employed about the establishment became ill with ordinary diphtheria, and one man conveyed the infection to his three children. It is worth noting that during all this time no other diphtheria cases occurred at Neeselshausen, or in the neighborhood. The inference seems obvious that all these cases originated with the sick fowl.

The Action of Antiseptics.

M. Gosselin has communicated to the Paris Academy of Sciences the result of his researches on the action of antiseptic substances such as a solution of carbolic acid, weak solution of alcohol, and camphorated brandy. He examined under the microscope a membrane submitted to the influence of these substances, and he observed that a solution of carbolic acid at 5 per cent. arrested the circulation of the blood in a few seconds; at 2½ per cent. it produced the same effect. After three applications, and at 1½ per cent., after an interval of ten minutes, alcohol at 88 degrees (Gay Lussac) produces the same effect as a solution of carbolic acid at 5 per cent. The effect of camphorated brandy is also similar. The arrest of circulation was not accompanied by vascular contraction, but was due solely to coagulation of the blood. If antiseptic agents of a suitable strength be used, they cauterize the surface of wounds and prevent the development of germs.

Mrs. Elizabeth Mason—Dr. M. Souveille & Co. Gentlemen.—Yours of last week to hand, and in reply to your enquiry I have much pleasure in stating that from the first time of using the spirometer and the medicine I have improved very much. The bronchitis has entirely left me. I sleep well and have a good appetite. I must also add, that coming to you as I did as a last resort, the cure effected has been wonderful. Gratefully yours. MRS. E. MASON, Jarvis, Ont.

Nov. 10, 1883.

Call personally at the Institute and be examined, if possible, if not write for list of questions and copy of *International News* published monthly, to International Throat and Lung Institute, 173 Church st., Toronto, or 13 Philip square, Montreal, P. Q.

"Never mind, my young kid, I'm going up to see your mother about this." "That's all right," yelled back the small boy, "you just go right along up there. Pa filled a man full of buckshot the other day for going to see my ma."

A ROMANCE OF REAL LIFE.

A Married Couple Confront Each Other Under Peculiar Circumstances.

As strange a romance of real life as is often heard of came to the knowledge of a *Times* reporter within the last day or two. The facts concerning it were obtained from one of the parties most interested in the affair, and as related below are absolutely reliable. This much needs to be said, as otherwise so remarkable a story would scarcely be considered worthy of belief.

Lyman Carman has been a pensioner of the United States since 1866. Before the war he was a resident of southern Michigan and joined one of the Michigan cavalry regiments. When he returned home he was suffering from a frightful wound, a shell having so severely shattered his left hip that recovery or even convalescence seemed almost an impossibility. And in these circumstances, so he states, Mrs. Carman declined to live with him longer, and they separated without having any quarrel or ill-feeling. Contrary to expectation, he recovered, and has since enjoyed fairly good health, and was only slightly crippled by his wound. His name has been on the pension rolls ever since.

About a year and a half ago his wife, who has for a number of years been married to a Mr. Root, and is now living in Illinois, filed an application with the pension office for a pension in consideration of being the widow of Lyman Carman. In her affidavit, and in the sworn statements of other parties which accompanied her application, Mrs. Root, or Mrs. Carman, as she may be, stated that her husband died six weeks after his return from the field of battle; that his death was the result of the injuries to his left hip; that he was insensible the greater part of the time prior to his decease, and that he died at the residence of an uncle named Fiske. At the pension office it was discovered that in the Michigan regiment named there had been but one Lyman Carman, and as that individual was still alive, and in receipt every quarter of his pension allowance, it seemed scarcely possible his widow could have a valid claim, and inquiries were therefore at once directed to be made. Upon instructions from the attorney general, the federal authorities in this city last week subpoenaed a number of the parties who had been witnesses in both the applications to the pension office. Carman and his wife were both summoned, and they met for the first time in eighteen years in the corridor leading to the United States court. Mr. Carman had already had an interview in the district attorney's office, and had learned, of course, with the utmost surprise, why he had been called to this city. He had only just left the office when, without any preconcerted arrangement, he encountered his wife (who is now claiming to be his widow) on the stairway, and his description to a *Times* reporter of what occurred is substantially as follows:

"Upon meeting my wife I at once recognized her, as she had not materially changed in features or general appearance. I stepped in front of her and said, 'Well, Jane.' She looked me in the face and said, 'I don't know you, sir.' To which I replied, 'Oh, yes you do, Jane. I am Lyman Carman. You must remember me very well as your husband.' She seemed a little surprised, and for a moment sank down upon the steps, but quickly recovered and repeated her first remark that she didn't know me at all, had never seen me before, and that I was not her husband. Subsequently I learned that in conversation with Mr. Holstein, the district attorney, she persisted in disavowing me, and invented a story that while I resembled her dead husband, I was in reality only his natural brother, and that my name was not Carman at all. It is a very ingenious story to be invented so quickly after our unexpected meeting, but the fact is I had no natural brother, but was myself born out of wedlock, and when, during my infancy, my mother married, I was ever afterwards known by the name of Carman. You think it is a curious story? Well, it is. I understand that my wife has said she will never admit that I am her husband unless she is compelled to do so by absolute proof. She says that I am dead, and declares that I died in the house of my Uncle Fiske. Well, my Uncle Fiske is here in the city, and he says that I did not die, and I know that I have been drawing a pension almost ever since my wife left me. Of course I have no special interest in the inquiry the authorities are making, but I don't suppose that my

widow will get any pension as long as I am alive. I have no desire, however, to say anything unkind of my wife, either as to her reasons for leaving me or of her conduct since, and I had never expected to meet her again if this matter had not come up in the shape it has."

In further conversation Mr. Carman said that he had always understood that his wife left him because there was no probability that he would ever be able to provide for her after his return from the war in the style she desired to live. Her tastes had always been somewhat extravagant, and, he said, probably since her marriage to Mr. Root she had been better provided for than she might have anticipated from him at the time of their separation. It may be added that both parties are well educated, and move in good circles in their respective localities.—*Indianapolis Times*.

How to Prevent Divorce.

When the senior Jonathan Trumbull was governor of Connecticut, a gentleman called at his house, requesting to see his excellency. Accordingly, he was shown into his *sanctum sanctorum*, and the governor came forward to meet Squire W., saying, "Good morning, sir, I am glad to see you."

Squire W. returned the salutation, adding as he did so, "I have called upon a very unpleasant errand, sir, and want your advice. My wife and I do not live happily together, and I am thinking of getting a divorce. What would you advise, sir?"

The governor sat a few minutes in deep meditation, then, turning to Squire W. said:

"How did you treat Mrs. W. when you were courting her? and how did you feel toward her at the time of your marriage?"

Squire W. replied: "I treated her as kindly as I could, for I loved her dearly at that time."

"Well, sir," said the governor, "go home and court her now just as you did then, and love her as when you married her. Do this in the fear of the Lord for one year, and then tell me the result." The governor then said, "Let us pray."

They bowed in prayer, and separated. When a year had passed away, Squire W. again called to see the governor, and grasping his hand said:

"I have called, sir, to thank you for the good advice you gave, and I tell you that my wife and I are as happy as when first we were married. I can not be grateful enough for your good counsel."

"I am glad to hear it, Mr. W.," replied the governor, "and hope you will continue to court your wife as long as you live."

The result was that Squire W. and his wife lived happily together to the end of their life. Let those who are thinking of separation in these days go and do likewise.—*Sci.*

Spider Life Wonders.

In a lecture at the Lowell Institute, Professor Wood dealt with the phenomena of spider life. The female is larger and much fiercer than the male, who while paying his addresses is in constant peril, frequently losing some of his legs. In one tribe the female is 1,300 times as large as the male. The spider's thread is made up of innumerable small threads or fibres, one of these threads being estimated to be one two-millionth of a hair in thickness. Three kinds of thread are spun: One of great strength for the radiating or spoke lines of the web. The cross lines, or what a sailor might call the ratlines, are finer and are tenacious, that is, they have upon them little specks or globules of a very sticky gum. These specks are put on with even interspaces. They are set quite thickly along the line, and are what, in the first instance, catch and hold the legs or wings of the fly. Once caught in this fashion the prey is held secure by threads flung over it somewhat in the manner of a lasso. The third kind of silk is that which the spider throws out in a mass or flood, by which it suddenly envelops any prey of which it is somewhat afraid, as, for example, a wasp. A scientific experimenter once drew out from the body of a single spider 3,450 yards of thread or spider silk—a length a little short of three miles. Silk may be woven of spider's thread, and it is more glossy and brilliant than that of the silk worm, being of a golden color. An enthusiastic entomologist secured enough of it for the weaving of a suit of clothes for Louis XIV.