La grippe epidemic, with treatment.
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La Grippe Epidemic,

WITH TREATMENT.

BY

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NEW YORK.
[MEDICAL CARD.]

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LA GRIPPE EPIDEMIC.

BY GEORGE B. BRADLEY, M.D.,

NEW YORK.

La Grippe or Influenza is not only here at our doors, but it is raging in the leading cities in the Eastern States, as well as in the West. It is, moreover, epidemic in England, France, Germany, Austria, Russia, Schleswig Holstein, Holland, Portugal, and even the Azores. In Australia almost the entire populations of some towns were prostrated by Influenza during September. There were 40,000 cases in Berlin during the last four weeks, and a like number in Vienna. The disease has been rekindled in different parts of the world. It is independent of hydrometric, thermometric and barometric changes.

What is the nature of this remarkable and mysterious affection? What is its etiology? What is its history? What is the course of an attack? What complications are to be feared and guarded against? What additional knowledge as to the malady have we gained since the last visitation? What treatment should be pursued? These questions demand explicit replies.

A Definition.

La Grippe may be thus defined: A continued fever, occurring generally as an epidemic; due to a specific cause; characterized by a catarrhal inflammation of the respiratory organs, and sometimes of the digestive; always accompanied by nervous phenomena and debility, frequently attended by serious nervous, mental and cardiac complications. In a word, it is a specific, epidemic, self-limited febrile affection.

Its symptoms and universality have given it many names, the more common of which are contagious influenza, febris catarrhalis, rheuma epidemicum, ladendo, Blitz-katarrh, Chinese catarrh, tacephalalgia contagiosa, follette, grenade, cocotte.
A Batch of Symptoms.

How can you recognize the unwelcome visitor? Here are the symptoms: The onset is sudden, a chill followed by fever, the temperature reaching 101 to 103 F., a quick compressible pulse and severe shooting pains in the eyes, forehead, joints and muscles. The chill and fever are rapidly followed by chilliness along the spine, pain in the throat, hoarseness, deafness, coryza, sneezing, injected watery eye, and a dry irritative laryngeal cough, sometimes becoming bronchial. The tongue is furred; there is anorexia, epigastric distress, nausea, vomiting, and often diarrhoea. There is always pronounced weakness and debility, the nervous system becoming early affected.

Its History.

This form of catarrh of the nose, throat and air passages, which from the manner of its distribution as an epidemic is undoubtedly a specific disease, is known here as La Grippe, the French name, from the Polish Grypka. Although it is popularly supposed to be a comparatively new trouble, its history dates back to the time of Charlemagne, whose army was attacked by this epidemic when returning from Italy. There were eleven periods of attack in the sixteenth century, sixteen in the seventeenth and eighteen in the eighteenth. Between 1800 and 1850 there were no fewer than ten, one extending from 1830 to 1833, another occurring in 1837 and the third in 1847–48.

Thousands died in Europe of the disease. Here is a medical description of it four hundred years ago in England: "A grievous pain in the head, heaviness, difficult breathing, loss of strength, restlessness, hoarseness, etc. The first day it was without spitting, but about the seventh or eighth much viscid phlegm was spat up. Others (though fewer) spat up only water and froth. When they began to spit, cough and shortness of breath became easier. None died except some children. In some it went off with a looseness, in others by sweating. Bleeding and purging did hurt."

During later epidemics thousands were affected simultaneously, and the populace of entire cities fell ill on one day. In a small town near Madrid, Spain, the treatment at first practiced was bloodletting and purging. Here two thousand persons, all of whom were bled, died. In Delft it carried off five thousand of the poor. Mild epidemics were noted in 1857-58 and 1864. Paris had an outbreak in the spring
of 1867 and Berlin in 1874. In 1879 a mild form of the disease prevailed in the United States. The first epidemic of La Grippe recorded in this country was that of 1647.

The Epidemic of 1889-91.

This outbreak of La Grippe originated in Russia, November 1889. One half of the population of St. Petersburg were attacked by it within three weeks of its appearance in that city. The weather at the time of the outbreak was unusually warm and humid. These conditions, coupled with unsanitary surroundings, were probably the exciting causes. By Dec. 15, the disease had spread over entire northern Europe, and, in the opinion of Dr. Cyrus Edson, head of the N. Y. Health Board, it reached this country about Dec. 20. It is uncertain whether to New York or Boston belongs the doubtful honor of having had the first case. Within fifteen days of Dec. 23, on which day the first cases were reported in New York, fully two hundred thousand persons had been afflicted with La Grippe in this city. The disease remained prevalent until April or May of 1890, when it subsided. It remained quiescent during the summer and fall, only to break out again in the early part of the following winter. Two distinct waves occurred, one in December, 1890, and another in the latter part of January, 1891. In February and March its effects were severely felt, and during these months it assumed a more aggravated form.

The epidemic of 1889-91 is in the recollection of all, but the present one will undoubtedly prove not the least formidable and fatal of modern outbreaks.

Its Origin.

No other disease diffuses itself equally widely over the earth’s surface. Not only is it capable of existing in all inhabited regions, but in some epidemics it has ranged over every quarter of the globe, and has established itself in places presenting all kinds of soil and every variety of climatic conditions. It, therefore, cannot be attributed to miasm. Again, it takes time to spread. Like Asiatic cholera, it sweeps over a country and passes onwards. In Europe it appears to have always spread from East to West, generally commencing in Russia, or perhaps in its supposed home, Chinese Tartary. So rapid is its passage that the disease appears to break out suddenly in places distant from each other and to at once attack a large proportion of the
inhabitants. Accordingly, the cause has been traced by many observe to a living germ, capable of reproducing and multiplying itself when once it has been introduced into a particular district or country.

The Aspergillus.

A singular circumstance is reported from Australia. A new pulmonary disease has appeared there, caused by an aspergillus. Now, the spores of the aspergillus fumigatus are the cause of La Grippe, according to the latest view of English physicians. So what appears here as La Grippe, often complicated, it is true, with pneumonia, develops in Australia as a pneumonia pure and simple.

The spores of the aspergillus have been found in diseased human bronchial passages and in sputum. Aspergillus fumigatus is a minute bluish-gray mould, very common in brown and barley bread etc.; the conidia are colorless, varying from 1 m. to 2.5 m. in diameter, and, what is especially noteworthy, thriving best at from 37 deg. C. to 40 deg. C., just the heat they meet with in the human body. According to Siebenmann these spores are very widely diffused, and it is quite conceivable that under favorable conditions of heat and moisture they might increase and multiply to an enormous extent, and be extensively disseminated by air currents over vast tracts of country. All evidence during the recent epidemic in England, according to the authorities, seems to point to an atmosphere impregnated with pathogenic germs, and it is not a little significant that the period of greatest influenza intensity was marked by comparatively mild, moist, and "muggy" weather. The suddenness of the invasion of influenza, the large numbers simultaneously attacked, the extreme rapidity with which it spreads, and the apparent caprice of its course, all point to an air-borne contagium.

The Board of Health View.

In the view of the New York Health Board, La Grippe is a contagious disease in the ordinary acceptance of the term, though it is probably only slightly so, for while two or three members of a large family are afflicted, others, though exposed to the disease, enjoy immunity. Its propagation is largely due to infection. The period of incubation appears to be from eighteen to twenty-four hours. The onset or invasion is extremely sudden. Patients complain of shivering or chilly sensation down the back, vertigo, often excessive frontal headache, muscular
or joint pains, and great prostration. In an exceedingly short time the
temperature rises. Males appear to be affected more frequently than
females, and those following outdoor occupations more frequently than
those working within.

The Hunt for the Bacillus.

The pathogenic bacillus of influenza has as yet not been definitely
recognized, notwithstanding the worthy labors of Tomasi-Crudelli,
Klebs and others. Prudden finds certain kind of bacteria. Marmorek,
in addition to these, finds several other kinds, and doubts the investiga-
tions of Robbert, while Babes and Cowalski see others which no one
else has described. Klebs, in examining the blood, finds abnormal bod-
ies; Kollman finds additional ones, while other bacteriologists report
negative results. In Dr. Gayle’s opinion influenza is due to a definite
micro-organisms which is in the atmosphere under certain conditions
and at certain places, which conditions of the atmosphere last for a long-
er or shorter period. When these micro-organisms come in contact with
the mucous-membrane of the respiratory tract, if the conditions are
such that they find lodgment, then the disease is manifested.

Viewed Pathologically.

Pathologically, there seems to be nothing abnormal relating to the in-
fluenza per se, except it be a lesion of the spinal cord, as has been seen
in some post-mortem examinations. The arachnoid membrane has been
found severely congested; this obtained all along the spine, in the cer-
vical, dorsal and lumbar regions. Degenerative changes were present
in various portions of the cord. Meningitis and also myelitis sometimes
occur. Neuralgias of the various nerves are common. There may be
muscular atrophy, the result of degeneration in the motor nerve cells.

Grippe’s Brother is Dengue.

There is a close resemblance between La Grippe and dengue fever,
or dandy fever, as it is sometimes called on account of the rheumatic
affection of the joints, which gives the patient a stiff, dandified walk.
They are doubtless closely allied. Both have, in common, sudden
invasion, high temperature, lumbar, and muscular pain, with cephalalgia.

It is Contagious.

Dr. Leeson declares that the disease is not “in the air” but that
it passes from patients to their friends and neighbors, and those who
come into immediate contact with them, in the same way as do measles and scarlet fever. Influenza, he holds to be most infectious in the early stages, and he believes one week's isolation would prove sufficient.

In an elaborate work covering an historical survey of the past epidemics in Great Britain from 1510 to 1890, Dr. Thompson thus sums up the arguments in regard to the question of contagion: "A careful résume of the evidence and opinions of competent observers leads to the conclusion that Influenza is contagious, but it does not follow that contagion is the only or even the most frequent method of communication."

In the course of a special report made to the British Government, Dr. Parsons says the Influenza is undoubtedly infectious, communicated from one to the other, but there are other less direct ways by which the infectiousness of the disease may travel, and by which it may be retained for a time in suspended activity.

Are There Three Varieties?

Many observers have affirmed that there are three different forms of the disease, viz, nervous, catarrhal and gastric. Dr. Julius Althaus denies this view and pronounces influenza to be always a true nervous fever, the symptoms of which only differ so far as the localization of the grippo-toxine in the different areas of the nervous system is concerned, all the symptoms of the attack being referable to irritant poisoning of a different centre of the nervous system. La Grippe stands foremost as a factor in nervous diseases. It is an infectious nervous fever, according to Dr. Althaus. The headache, utter prostration of mental and bodily strength, delirium, coma and convulsions, point unmistakably to the nervous system as their starting-point, while cartarrh of the mucous-membrane and pneumonia are completely absent in a large proportion of cases. Indeed, many patients have influenza without having a cough or sneezing.

Children almost Exempt.

From all the statistics gathered, it appears that children are almost exempt from La Grippe, and that the ages most susceptible to it are 30 years and upwards.
Seasonal Influences.

An effort has been made to ascertain as to whether influenza would appear as a complication in diseases of which the maximum mortality was highest at certain months of the year. The last influenza epidemic in London occurred late in the spring or early summer, at which period there is generally the largest mortality from nervous diseases and bronchial complaints. But an investigation showed that influenza had come once as a complication only upon diseases which were usually most fatal in the spring or early summer, but not on diseases such as bronchitis, pneumonia and consumption, the mortality from which is, as a rule, greatest in winter.

No Immunity from Attack.

The British Medical Association has collected these facts: Those who have previously suffered from La Grippe do not seem to possess an immunity from a second seizure, and in most cases recovery is protracted and slow.

The Disease Abroad.

Dr. Urquhart speaking of the British epidemic says: “It is perhaps not so acute in the attack as on the first occasion, but it seems to be more extended, whole families having been seized. The sequelæ have been very often severe, and include such troubles as suppuration in the ears, pneumonia, insanity, and so on.”

An Aberdeen physician declares that the victims of the infection have been chiefly persons between 40 and 60 years, but older persons have been attacked, and in their cases more dangerous complications were liable to develop. In Scotland La Grippe has proved specially disastrous to city policemen on night duty.

In England, according to Dr. Williamson, an attack usually commences with high temperature, head and backache, and extreme prostration.

Pulmonary Complications.

Whether we view La Grippe as one disease with complications, or admit that there may be marked divisions, it can be discussed more simply under three heads: First, the catarrhal or pneumonic form; second, the neurotic form; third, the gastric form.
In the catarrhal or pulmonary form, there is at the onset a sense of chilliness along the spine, in some cases a pronounced chill, with high fever, sore throat, frontal headache, sneezing; pains in the limbs and various parts of the body, particularly in the thoracic region. Pneumonic symptoms occur in many patients, with frequent cases of pneumonia. Perhaps 40 per cent. of these catarrhal cases of influenza have a typical pneumonia; severe cough, with dyspnœa and tightness of the chest, is often present; soreness about the eyes; coryza and all the symptoms of a "bad cold" generally follow. The pulse ranges from 90 to 120, usually full in volume, although in many cases it gets small and wiry. The urine in nearly all types of influenza shows an increase in the acid constituents; there are often indications of bile, and in a few cases hematuria. The torpid liver is frequently a concomitant, followed by constipation. Pulmonary abscess and pleurisy are occasional results. The angina is sometimes very severe, with croupous deposits on the tonsils and pharynx. Laryngitis, with swollen and reddened vocal cords, is often seen. The bronchitis is frequently grave. Ear diseases are in many cases a prominent sequel, particularly otitis media. Influenza being an essential fever, the bronchitis is the local manifestation of the constitutional trouble, and not primary or idiopathic. There have been some cases in which hemoptysis occurred, where only bronchial signs could be detected, which recovered without further pulmonary trouble, thus showing a total absence of tubercle at the time of the hemorrhage.

Relationship to Nervous Diseases.

The neurotic type of this trouble consists chiefly of nervous symptoms, fever, prostration, headache, lumbago, pleurodynia, pains in the limbs, and sometimes a general cutaneous hyperesthesia. Delirium is often noted. Some cases show giddiness and tinnitus aurium, which may continue after the disease has subsided. The olfactory nerves are frequently affected and show perversion of the sense of smell. The auditory apparatus is occasionally involved; in fact, various manifestations of the neuroses show themselves, particularly when there is a neuropathic predisposition.

Influenza may be complicated with, or followed by hysteria, hypochondria and various forms of mental disorder, generally of a low or depressed type. The latest reports of the epidemic prevailing in England show that influenza seemed to attack the sane more than the in-
sane population of asylums, as was shown by the statistics of Morning-
side Asylum, Edinburgh. It was equally marked by neurotic symp-
toms, such as neuralgic pains in limbs, etc., in the nervously weak and
the strong; but the true neuroses rarely appeared except in persons
who were by heredity, previous attacks or other causes, such as con-
stitutional syphilis, in a state of nervous instability. The after-effects
had no distinct relation to the severity of the disease. The period at
which the symptoms developed varied very considerably.

Any variety or form of insanity may occur, from the mildest hys-
teria to general paralysis of the insane, according to Dr. Savage. Nerv-
ous symptoms of all sorts may occur quite independently of insanity,
so that there may be delirium of considerable gravity, with loss of con-
sciousness during the acute period of the disease. Simple neuroses of
various kinds may arise with and after the attack; of these, the most
common are sleeplessness, amnesia more or less general, neurasthenia,
hypochondriacal and self-conscious feelings, neuralgia, and rarely fits
of an epileptic nature. Diabetes also has been reported as a sequel.
In the more developed nervous disorders there have been examples of
delirious mania of a severe and even fatal type, acute mania of a
simple and hysterical form, hypochondriacal and other forms of mel-
ancholia, and the self-conscious state has in some cases grown into
tue delusional insanity, with hallucinations of the senses. In one
case a strange form of automatism is reported to have appeared; and
as crime may result from such condition, there is a medico-legal aspect
to the subject as well as a medical one. In several cases general
paralysis of the insane has followed directly on the influenza. In most
of these cases there is evidence of signs of degeneration before the
onset of the influenza, but it is after the development of the latter that
the disease is discovered.

Patients who as the result of influenza become insane, as a rule
recover; but there are two classes in which there is great danger—
those in which acute delirious mania occurs, and those in which general
paralytic disease is present.

The nervous symptoms in this disease are remarkable from the
fact that they are scarcely ever alike in any two cases. Blocq says:
"First. Certain nervous affections are really grippal, in the sense
that they may be considered special localization of influenza upon the
nervous system. Second, Another group depends equally upon the
grippe, but, secondarily, it is not the grippe itself, but the secondary
infections which have determined the neuropathies. Third. A third category includes the neuropathies, in the development of which influenza has only been an exciting factor, determining a recurrence of a previous but recovered-from condition, or bringing about a new condition in an individual predisposed.”

Some extraordinary cases of nerve trouble following influenza are reported from England. Dr. Taylor reports a case in which a man was laid up with the disease for nine days, suffering with pains in head, back and limbs, during which attack he lost what he called the “side light” in his eyes. Additional symptoms followed, consisting of numbness and stiffness in the right hand and both feet, and difficulty in walking. This last named difficulty was something like that of locomotor ataxia. At length he lost feeling in his hands and legs, and for eight days before death he could move no limb except the left hand off the bed. He also had coughing spasms and became blind. This patient is reported to have been a temperate and healthy man before his attack of influenza.

The Cause of Mental Troubles.

Dr. Leledy, a leading European specialist, points out that many suicides have resulted from the depression following La Grippe. He thus sums up his opinions respecting the relationship of nerve and brain troubles to the epidemic: 1. Influenza, like other fevers, might set up psychopathy. 2. Insanity might come on at various periods of the disease. 3. It might start any form of insanity. 4. No specific symptoms resulted from it. 5. The role of the influenza varied in the production of the insanity. 6. It might be the predisposing or the exciting cause. 7. In all cases there was some acquired or inherited predisposition. 8. The insanity followed from altered brain nutrition, possibly toxic. 9. The onset of insanity was often sudden, and bore no relationship to the severity of the influenza. 10. The curability depended on general rather than special conditions. 11. The insane were less disposed to take it than the sane. 12. It had cured psychoses in rare instances. 13. The insane might have mental remission during the influenza. 14. Influenza might lead to crimes and medico-legal issues.

The results of observations made at Professor Jolly’s clinique in Strasburg may be thus summarized: When mental disease is brought on by influenza, in the great majority of cases the patients are of the
neurotic temperament. The attack may come on at any stage of the influenza, but there appears to be a preference for the period of convalescence. In the majority of the cases the symptoms were those of melancholia and hypochondriasis. Neither sex was specially liable. Most cases occurred between 20 and 50 years of age.

Dr. Mispelbaum, another European specialist, has found that delirium and melancholia frequently follow influenza, also occipital and supra-orbital neuralgias and long-continued sleeplessness. He advises special care and observation during the period of lassitude following influenza.

**La Grippe at the Stomach.**

In the gastric form of the disease, there is usually nausea and vomiting, with pain seemingly throughout the mucous membrane of the alimentary tract, also the respiratory tract. The vomiting sometimes is persistent; the liver and spleen are involved, and show abnormal conditions. Frequently the pyrexia and concomitant symptoms give the impression that there is a tendency to the typhoid condition, although the characteristic temperature curve of typhoid fever is absent in influenza. Many of these symptoms may be merged into one—nervous prostration. Inflammation of the mucous membrane of the respiratory tract and disturbances of the digestive organs may affect the patient at the same time.

**Odd Complications.**

Alopecia, loss of hair in patches, in some cases follows an attack of influenza. Erythematous and erysipelas eruptions may occur, and at times are troublesome. Anorexia prevails in nearly every case. Cystitis and nephritis are sometimes seen, and can be traced to the influenza, or rather to the morbidic agent producing it. In senile cases, particularly if complications exist, there is great danger.

**Treatment.**

The Health Board of this city recommends the following preventative measures: Wear warm clothing next to the person. Adopt a plain, nourishing diet and take your meals regularly. Avoid late hours. Keep indoors as much as possible, especially at night. Shun crowded places, public meetings, etc. When in the open air, keep in motion;
avoid wetting the feet. On entering a house, remove overcoat or wraps at once. Keep away from those suffering from the disease. In a word, avoid exposure and excess; adopt regular habits and live well. On the first symptom of the disease do not attempt to treat yourself, but send at once for a physician.

A prophylactic is composed of equal parts of pure carbolic acid and glycerine, of which two or three drops may be placed on a handkerchief, which is to be used before leaving the bedroom. This recommendation comes from a leading London physician. It is further suggested that when influenza generally prevails in a great city, disinfectants, such as carbolate of creasote or carbolic acid, should be freely sprinkled on the public thoroughfares.

The indications for treatment are (1) Aid the system to eliminate the poison; (2) Relieve pain; (3) Counteract depression. Rest in bed is important. The drugs recommended by different authorities include cathartics, quinine, phenacetin, antipyrin, antikamnia, spiritus aetheris comp., coca, iron, strychnine, stimulating expectorants, sprays of carbolic acid, turpentine or resorcin, inhalations, atropine, salol, muriate of pilocarpine, digitalis, strophanthus, carbonate of ammonia, calomel, ipecac, senega, etc. All these may be used advantageously as the indications present themselves.

Fagge points out that the old treatment with antimony and bleeding proved absolutely injurious. He advises quinine, salines for a day or two, and then ammonia with senega or serpentaria.

Parkes insists that the common custom of feeding the patients with hot beef tea is a very bad one, invariably increasing the headache and langour. He advises such beverages as iced milk and soda water, barley water with lemon juice, or very weak cold white wine whey. To the young, stimulants should not be given at the early periods of the disease. Later a good supply of food should be allowed, and tonics are necessary.

Loomis contends that the disease can sometimes be aborted by quinine in large doses. Dover's powder and ipecac are useful. In rheumatic subjects colchicum and acetate of potash work admirably; strychnine and iron in small doses are valuable during convalescence. Depressing remedies should be avoided.

Cyrus Edson recommends a laxative at the onset, followed by phenacetin or salol. Antipyrin and its congeners he admits relieve the pains rapidly, but are open to the objection that they augment the de-
pression. The depression is best counteracted, and the emunctories of the skin and kidneys stimulated, by spts. ætheris comp. Coca, quinine, iron and strychnine are useful. Inhalations of benzoïn, with good cough mixtures, are of advantage. Carbonate of ammonia, aconitine and digitaline effect good results. Atropine may be used to control excessive sweating.

Gayle favors the use of a preparation of chlorides of ammonium and potassium with tincture of chloride of iron for “swabbing” the throat. Internally he uses antikamnia and the expectorants, senega and ipecac. Calomel he finds valuable. If necessary, he prescribes digitalis and strophanthus as heart tonics, muriate of pilocarpine as a diaphoretic, and sprays of carbolic acid, turpentine or resorcin for larynx.

Ringer has given cimicifuga with much success. He also recommends cocaine or cubebs, together with sulphurous acid fumigation or inhalation.

Waring recommends ammonium combined with nitric or chloric æther, also sanguinaria, opium and potassium nitrate.

Da Costa favors inhalations of the compound tincture of benzoin.

English authorities recommend gelsemium, tincture or fluid extract.

Potter suggests mixtures of cimicifuga and opium; also ipecac, opium and aconite for the bronchitis, and ammonium chloride, morphine, sanguinaria and ipecac for the cough.

Savage advises, for nerve complications, good food, sea air, restfulness, sulfanal and morphia.

McLane Hamilton recommends in toxœmic headaches the salicylate of soda, iodide or acetate of potash and preparations of mercury or colchicum.

Pritchard for melancholia gives the aqueous extract of opium, sometimes with cannabis indica. As a hypnotic he uses sulfanol and chloralamid, or the bromides. Extract of malt for the promotion of nutrition, calisaya as an appetiser and cascara sagrada as a laxative constitute the remaining therapeutic measures. Occasionally he prescribes nitro muriatic acid and strychnine, and applies galvanism.

Waugh, Weber and Wright (Boston) declare that phenacetin acts almost like a specific.

Dr. Benjamin Lee, in an analysis of forty-one thousand cases of epidemic influenza, arrived at the conclusion that “all the remedies
which were found most beneficial in the treatment of this affection are nervines, such as phenacetin," together with certain sedatives or stimulants, which he mentions.

Humphrey advises gelsemium during day and phenacetin at night.
Rathgeber, of Hamburg, uses quinine and phenacetin as a prophylactic.
Haller, in his treatment of 314 cases, emphasises salol and phenacetin.
Davidson scarcely uses anything except antifebrine and phenacetin.
Keeley gives caffeine in combination with phenacetin, and Terry subdues the pain and nervous irritation with phenacetin, and then with an equal dose of sulfanol secures quiet sleep.

Reviewing the methods of treatment pursued by leading authorities in America and Europe, the author has adopted the following as the best remedies to be applied—a list that cannot fail to meet every contingency and secure the most gratifying results: Gelsemium, phenacetin, acetanilid, digitalis, spiritus ætheris comp., sprays of carbolic acid, thymol and resorcin combinations, inhalations of benzoin, codeine with ammonia, senega or serpentina, strychnine, sulfanol and cannabis indica.

The Outlook.

Dr. Nagle, chief of the Bureau of Vital Statistics of this city, who has made a careful study of the record of deaths from the grip, thus gives his opinion of the outlook:
"The indications are that there will be a return of the grip this winter similar to that of 1889-90. The grip was worst in 1889, and the atmospheric conditions were the same as at present. The deaths do not measure the prevalence of the grip at present, because the systems of the sufferers have not been sufficiently reduced in vitality; but the indications are that during the month of January and in February the death rate will take a leap, and may reach the highest notch of 1890. The doctors who call at Police Headquarters report that there are more cases of the grip in the city among their patients than at this time last year. It is steadily increasing.
"The conditions point to a very grave danger in the next two months, and it will benefit all to be very careful about exposing themselves or doing anything to lower the vitality, as a weak person cannot withstand a severe attack of the grip."

A Parting Word.

Written inquiries, either from physicians or from general readers, will be answered by the author, so far as time will permit, as regards La Gripe Epidemic, and also the curability of pulmonary consumption, which formed the subject of a previous monograph.
103 West Ninety-Third Street.
January, 1892.
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La grippe epidemic, with treatment.