La Grippe

AND ITS

TREATMENT

For General Readers

BY CYRUS EDSON, M. D.
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THIS LITTLE VOLUME
IS RESPECTFULLY INSCRIBED TO THE
HON. EDWARD COOPER,
EX-MAYOR OF NEW YORK CITY,
WHOSE INTEREST IN THE SUBJECT
SUGGESTED ITS PUBLICATION.
La grippe has clearly indicated, by its course during the past two years, that it intends to become, for a time at least, a naturalized denizen of the United States.

We may expect periodical outbreaks of this disease whenever favorable climatic conditions afford an opportunity for the development of the bacillus or germ by which it is caused. To the writer, therefore, it seems proper and timely that the following pages should be published.
It has been his endeavor to treat the subject so that it may be understandingly read by all who desire to inform themselves concerning the disease and to forearm themselves against it. A word of warning, however, must be sounded here. The advice given under the heading of Treatment is not intended for those who may be afflicted with *la grippe* and who are within reach of a capable medical man. To those I would say: On the appearance of the first symptom of the disease, do not attempt to treat yourself, but send at once for the physician. Nothing that you can learn from reading tracts upon single medical subjects can
qualify you to stand in the place of the doctor.

Most of this little work was published by the writer in the *North American Review* (February, 1890) under the title of The Prevailing Epidemic. The editor of that periodical, General Lloyd Bryce, has kindly permitted its revision and reprint here.
LA GRIPPE.

I.

HISTORY.

La grippe 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, tac, cephalalgia contagiosa, follette, grenade, cocotte.
Although there is reason to believe that *la grippe* was not unknown to the ancients—a supposed outbreak of it that occurred in the Athenian army having been recorded by Siculus, 415 B.C.—nevertheless, accounts of the disease before the sixteenth century are unreliable. Vague descriptions of a disease that occurred from period to period, characterized by cough and fever, have been handed down. For instance, in 827 A.D. a cough affection spread over Europe, and in 876 a similar epidemic is stated to have started in Italy and to have rapidly invaded other European countries. Again we hear of a fever and cough affecting the people of
France and Germany in 976. In 1173 a catarrhal fever spread throughout Europe, and again appeared in less severe form during 1239–’99.

Parkes describes traditions of six epidemics similar to contagious influenza that occurred during the fourteenth century and seven during the fifteenth. An epidemic in 1403 paralyzed commerce on account of its severity and the high mortality that was due to it.

In 1510 a disease visited Great Britain characterized by “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.

This account was by a chronographer living at the time and quoted in the work by Thompson, *Annals of Influenza*, 1852. In this work is also another account by Thomas Short of an epidemic in 1557 that, originating in Asia, spread over Europe and thence
across the Atlantic to America. The outbreak occurred in England in September after a season of unusual rain and ruined crops. This is the description given: "Presently after were many catarrhs quickly followed by a more severe cough, pain of the side, difficulty of breathing, and a fever. The pain was neither violent nor pricking, but mild. The third day they expectorated freely. The sixth, seventh, or, at the furthest, the eighth day, all who had that pain of the side died, but such as were blooded on the first or second day recovered on the fourth or fifth; but bleeding on the last two days did no service. Some, but very few,
had continual fevers along with it; many had double tertians, others simply intermittent. All were worse by night than by day; such as recovered were long valetudinary, had a weak stomach, and hypped.”

This epidemic was doubtless malignant *grippe*, made malignant by the frightful unsanitary conditions of the age.

It is said that thousands were affected simultaneously and that 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 (Wilson in Pepper’s
System of Medicine). "In Delft it carried off five thousand of the poor." This epidemic lasted until the middle of 1558.

In 1580 we learn of another outbreak characterized "by great sweating at the end of the attack."

To describe all the epidemics of la grippe that affected the civilized world from this time to the present would require more space than can be devoted to it here. The following are the years during which it prevailed extensively: 1591, 1593, 1610, 1626, 1627, 1642, 1643, 1647, 1655, 1658, 1675, 1688, 1693, 1709, 1729, 1730, 1732, 1733–38, 1742–43, 1757–58, 1761, 1762, 1767,
1775, 1778–’82, 1788–’90, 1795–’97, 1805 to 1827. Few years during the latter period were free from it. 1830, 1831–’32, 1837. From 1837 to 1851 numerous epidemics occurred. 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. It has been described by Da Costa.

The first epidemic of *la grippe* recorded in this country was that of 1647. An account of it may be found in Mr. Webster's *A Brief History of Epidemic and Pestilential Diseases.*
The idea recently advanced by a Chicago physician that the disease is caused by a microbe contained in star-dust is not entirely original. A Dr. Willis, writing in 1658, says: "About the end of April, 1658, suddenly a distemper arose as if sent by some blast of the stars," etc. The striped microbe, however, discovered in Chicago by the same physician is unique and must be a wonderful bug.
II.

THE EPIDEMIC OF 1889-'91.

This outbreak of *la grippe* originated, or seems to have originated, in Russia about November 1, 1889. According to the European press accounts, 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 December 15th the disease had spread over entire northern Europe, and, in the opinion of the writer, it reached this country about December 20th. It is uncertain whether to New York or Boston belongs the doubtful honor of having had the first case. Within fifteen days of December 23d, on which day the first cases were reported in New York, fully two hundred thousand persons had been afflicted with *la grippe* in that city.

The disease remained prevalent until April or May of 1890, and then subsided. It remained quiescent during the summer
and fall, only to break out again in the early part of the winter following. Two distinct waves of it occurred before general attention was drawn to its prevalence. One of these waves was noticed in the early part of December, 1890, and another in the latter part of January, 1891.

In February and March its effects were severely felt. During these months the disease assumed a more aggravated form than when it first appeared, though indeed not approaching in severity the type of some of the old-time epidemics.

There can be no doubt that the disease is due to some micro-organism carried in
and by the air, and probably also by the clothing and other material.

This micro-organism infects the human system, giving rise to the symptoms peculiar to the disease, but in so doing it rapidly destroys itself or is destroyed by some protecting influence in the human body.

Observers of the highest standing differ upon the subject of contagion, some holding that it is highly contagious, others that it is slightly so, and others still that it can not be transmitted from person to person. The arguments advanced by the latter in defense of their opinion are that its rapid and al-
most simultaneous diffusion precludes the idea of personal contagion.

The extremely short period of incubation tends also to disprove it. In households persons who can not be shown to have been subjected to the disease are seized with it one after another, a few hours only intervening between each case. Then, too, they say previous epidemics have occurred and have disappeared after running a short course. If, therefore, it were contagious, the disease would be kept alive for a longer period; indeed, it would, like other contagious diseases, never entirely leave us.

On the other hand, the advocates of the
contagious theory point out that the disease always follows the main lines of commerce and travel. In hospital wards it has been observed to affect patients in regular order, traveling from bed to bed.

They also quote numerous instances of contagion from infected clothing, letters, etc.

It must be admitted that neither side have satisfactorily proved their theory.

To the writer it appears to be a contagious disease in the ordinary acceptance of the term, though it is probably only slightly so, for he has frequently seen one or two members of a large family afflicted, while
others, though exposed to the disease, enjoyed 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 sensations down the back, vertigo often, excessive frontal headache, muscular or joint pains, and great prostration. In an exceedingly short time the temperature rises as high in some cases as 105° F. It varies, according to the severity of the attack, from 101° to 105°, or even in rare cases rises to 106.5° F. The pulse is accelerated,
but not in proportion to the high temperature.

Two distinct varieties of the disease have appeared in this epidemic—the febricular, or nervous, and the catarrhal. The former is most common, the latter most severe in its effects. The febricular, or nervous, form is characterized by the symptoms already mentioned and by severe pains attributed by patients to the bones of the lower extremities, back, and hips. The prostration is not dangerous except to weakened and debilitated individuals. It, however, engenders a most aggravated form of "the blues," and a number of suicides of per-
sons suffering from it have been reported. As the disease progresses, rheumatic pains occur in the joints, especially of the lower extremities, and severe lumbago often sets in. The tongue is coated, the breath foul, and the bowels constipated. A very curious symptom in a few cases is that of cutaneous eruption, of which I have known eighteen well-authenticated cases, five of which were reported to the Board of Health of New York as cases of scarlet fever, so closely did the rash resemble that of the latter disease; sore throat and strawberry tongue were also present. In twelve to twenty hours this rash totally disappeared. The French Acad-
emy of Medicine discussed this eruption at some length, and, as far as I can at present ascertain, decided that it was due to antipyrine, which has been so commonly used in the treatment of the disease. In five of the cases reported, however, no medicine of any kind had been administered.

The catarrhal form of the epidemic is marked by the same prodromal symptoms as the febricular; but, in addition to these, there are sneezing and coughing, due to congestion of the mucous membrane of the respiratory tract. This sometimes results in a bronchitis of the smaller, or capillary, bronchi, or even in a broncho-pneumonia.
The eyes are congested and watery. Some cases even suffer from acute catarrh of the stomach, and have in consequence persistent vomiting. The sense of taste, as well as that of smell, is, in many instances, temporarily lost.

The febricular form almost invariably terminates in recovery in from thirty-six to forty-eight hours. The catarrhal variety, however, lasts longer, taking from three to nine days to run its acute course. Convalescence from both is slow, but especially so from the catarrhal. The patient is weak and ailing for some time. The slightest exertion causes profuse perspiration, and
relapse, in consequence, easily occurs. Chronic catarrh of the air-passages is apt to be left after an attack of the catarrhal form.

The name contagious influenza is a misnomer, as it applies only to the catarrhal variety, and this probably occurs in only about twenty per cent. of the total number of cases. It was the name and the description of the catarrhal form that misled the physicians of the country and delayed the recognition of the disease.

Males appear to be affected more frequently than females, and those following outdoor occupations more frequently than
those employed within. Children seem least of all subject to it.

Modern *la grippe* is rarely fatal in itself, except to the aged. It is, however, highly dangerous to persons suffering from severe chronic ailments, such as consumption, Bright's disease, affections of the heart, etc. Persons excessively debilitated from any cause frequently succumb to its effects.

Pneumonia is a very dangerous complication of *la grippe*. The depression caused by the former, augmented by that of the latter disease, effects fatal results in a large proportion of cases. Convalescence from pneumonic *grippe*, or *grippe*-pneumonia,
when it does occur, is slow and tedious. Patients remain prostrated for a much longer period than is the case after uncomplicated pneumonia.

A few cases of what may be called malignant *grippe* have been recorded during the present epidemic. These were of the febricular form, and, so far as I have been able to learn, occurred in badly nourished individuals who were subjected to unsanitary surroundings. Autopsies showed intense poisoning similar to that of typhus fever, a softened spleen, fluid blood, and hypostatic congestions of various internal organs. Such cases only emphasize the ne-
cessity of enforcing sanitary laws and of educating the masses at least in rudimentary hygiene.

A distinguished physician (Dr. George F. Shrady) has recently said: "To speak of the value of cleanliness to a physician is like arguing with a mathematician on the value of the multiplication table," and yet cleanliness is the alpha and omega of hygiene. It is the foe of malignant contagion.

Physicians have been struck with the resemblance of la grippe to 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, dan-
dified walk. They are doubtless closely allied.

The following preventive measures should be followed, especially by persons convalescing from other ailments, by those suffering from chronic diseases, and by old persons: 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 good deal has been said by alarmists concerning the probability of cholera following the present epidemic. I can not do better than to quote a paragraph on this subject from an able editorial in the New York Medical Record of December 14, 1889, which voices exactly my opinion:

"We observe that some feeling of alarm prevails lest this epidemic be a precursor
to cholera, as was the case in 1831 and 1847. There have been, however, plenty of cholera epidemics without a preceding influenza, and a great many influenza epidemics without any associate cholera. The micro-organisms of the two diseases are as essentially different as are the diseases themselves. The cholera germ lives in water and soil, the influenza germ in the air. The relation between the two diseases has been, we believe, purely accidental."
III.

TREATMENT.

*La grippe* naturally runs a short course if the system be sufficiently strong to withstand its effects and if Nature is not too seriously embarrassed by misdirected efforts at cure.

Three indications are to be fulfilled:

1. Means must be taken to assist the system to rid itself of the poison to which the attack is due.
2. Pain must be relieved.

3 (and not least important). Depression must be counteracted.

A laxative should be given at the onset, and for this purpose nothing is better than castor oil in a single dose of a dessert- to a tablespoonful. If the oil is too objectionable, as it is to some sensitive persons, one or two compound rhubarb pills will effect a desirable result. Three or four powders of phenacetin, each containing three grains of the drug, are usually sufficient to relieve the headache and muscular pains. Salol may be combined with the phenacetin to advantage. Two grains and a half of each
given at half-hourly intervals will accomplish the same result. It is possible that these remedies act as germicides upon the active cause of the disease, but, whether they do or not, the coal-tar derivatives should be used with very great caution and only a sufficient number of doses given to control the pain.

Antipyrine and its congeners are powerful depressants and serve to augment the depression caused by the disease. While they relieve the pains of *la grippe* more rapidly and to better purpose than any other remedies, they are open to this very serious objection.
The depression is best counteracted and the emunctories of the skin and kidneys stimulated by Hoffman's anodyne. This preparation seems almost to have been especially devised for the treatment of *grippe*. It is anodyne, diaphoretic, diuretic, and stimulant. It should be given in half-drachm to drachm doses every three or four hours while the patient is confined to bed. A hot grog of coca wine (I prefer that prepared by Mariani & Co.) is also excellent for the purpose of causing mild diaphoresis. Professor Lafont, of Lille, recommends its use. This grog should be made one third wine and two thirds water. It
should be taken very hot with a little sweetening.

During the entire course of the disease and its convalescence stimulants and tonics should be freely used.

Champagne, generous wines, coca preparations, and tonic doses of quinine, iron, and strychnine are indicated. Milk punch made with Jamaica and Santa Cruz rum, a tablespoonful of each to a tumblerful of milk peptonized with peptogenic powder, is excellent. A tablespoonful of this may be given every half hour during the acute stage and a tumblerful three times daily during the stage of recovery. During this
period the elixir of quinine, iron, and strychnine phosphate is as good a tonic as can be used.

The catarrhal form of the disease must be treated, like the febricular, with stimulants and tonics, but the irritation of the air-passages must be allayed. This is best accomplished by means of inhalations of the compound tincture of benzoin, which may be secured by means of the ordinary croup kettle, the steam from which is also beneficial, or more conveniently by the use of the vaporizing inhaler.

The following formula is best adapted for the latter apparatus:
\[ \text{B. Tinctura benzoin. comp.,} \]

\[ \text{Glycerin.,} \]

\[ \text{Spirit. vini rectici.} \quad \alpha \alpha \quad 3j. \]

\[ \text{M. Sig.: Inhale from vaporizing inhaler as frequently as necessary.} \]

The chest should be rubbed until the skin is thoroughly reddened twice in every twenty-four hours. Chloroform liniment or camphorated oil should be used as a rubifacient.

The following mixture will be found to loosen and allay the cough:

\[ \text{B. Tinctura opii camphorat.} \quad 3j; \]

\[ \text{Syrup tolu sufficient to make a four-ounce mixture.} \]
TREATMENT.

M. Dose for adults, a teaspoonful every two, three, or four hours.

During the administration of the latter a mild saline aperient should be given in hot water an hour or so before breakfast to counteract the effect of the opium upon the bowels.

Carlsbad salts, half a teaspoonful to a teaspoonful in a tumbler of hot water, or a wineglass of Hunyadi water, will fill this indication.

Carbonate of ammonia is also excellent for the cough. It may be given in five- to ten-grain doses in milk at four-hour intervals. It is best administered after the
first twenty-four hours of the attack have elapsed.

Cough mixtures containing antimony, ipecac, or other depressant remedies, are strongly counterindicated.

The treatment of pneumonic grippe is essentially the same as that of uncomplicated pneumonia. Great care, however, must be taken to preserve the strength of the patient. Careful stimulation is indicated. Depressant remedies should not be used. Aconitine, digitaline, and strychnine, in small doses frequently repeated, appear to effect good results. The stimulant treatment mentioned in the preceding pages
also acts well. The sweating during convalescence of *la grippe* will not be so severe if the mild stimulating diaphoretic measures previously recommended be employed during the acute stage. If, however, it is desirable to control excessive sweating, it may be done by means of a pill containing one one-hundredth of a grain of atropine given morning and night, or, better, by an alcohol-and-salt rub at the hands of a competent massage operator. Two or three good rubs of this kind will suffice to cure this distressing and dangerous symptom.

If the line of treatment here indicated be followed, the writer believes that the
great depression caused by the disease will be alleviated, and that convalescence will be more rapid and satisfactory.

The description given in one of our comic weeklies by an Irishman, that it was "a disease that kept you sick fifteen days after you got well," will apply with less force. The root of its improper treatment is to be found in the fact that patients expect too much of the physician, and, by means of antipyrine and other depressants, too much is but too frequently done.

THE END.
The relation is not always clear but we may say that the
semantics of the sentence and the interpretation may be
more difficult with compounds.

This section brings to light the nature of these
certain challenges in interpreting grammatical
structure. This also makes it easier to see that selection
of the correct word or phrase may lead to a different
interpretation.