

enormous influx within ten years of persons who do not speak our language or understand our principles is a danger not sufficiently appreciated. We have given them too easily the ballot, fearing a worse evil,—a brute force having no power except brute force,—believing that the ballot will satisfy the man who without it would be a foe to all government. This danger, however, is not to be apprehended from women, who are non-combatants, and, as a sex in general, never think about government at all. But having given a share in government to tens of thousands who are unfitted for it, it is proposed with easy assurance to give it to millions still more unfitted. We must not look at the intelligent, virtuous, and high-minded women alone, who all have their peers and equals in virtue and wisdom among men, but at the female compeers of the ignorant and brutal men who menace our safety in holding political power. It is useless and unnecessary to go over the oft-repeated reasons why one sex is fitted for public life and the other is not; they are too familiar, and have been argued upon till the subject is threadbare. But the present extreme difficulty in settling the great questions on which political parties differ—the grave crisis, financial, industrial, and political, through which our country is struggling—should make every practical statesman hesitate before he seeks to introduce a new element of difficulty.

It is curious and interesting at any summer resort or other gathering of intelligent women to see the general profound indifference to politics—to any news of the day, however exciting, which relates to the affairs of the nation. Still more curious is it to observe, on questioning ardent female suffragists, how little they know about the great questions of the hour. They generally say, "Oh, both parties are terribly corrupt, but when women vote, politics will be purified." Will it? Are not women also possessed of mortal infirmities? Will not many women sell their votes, bargain for office, intrigue, combine with others for selfish ends? Where there is no temptation, there is no sin; but when power comes, and with it temptation, shall we find that God has created one sex "good," the other "bad"? Ah, no; women are like men, of the same time and race, only their pursuits, occupations, and habits of life differ; their sphere is domestic, their intercourse with the world far more limited. They now have power to do far more by influence in public matters, by an intelligent interest in schools, hospitals, almshouses, than they exercise; and it is lamentable that so few women care how the public charities of their own towns are managed. There is no good reason to think that the right of suffrage will increase that interest. A spirit of humane unselfishness leads men and women both to care for the unfortunate—and too few men care for them now, in spite of their right to vote.

I cannot forbear, in closing, to speak of the personal references which Senator Hoar has made. The women who have rendered most "*public service*" in his own State are unknown to fame. The women's prison at Sherborne was the result of the life-work of Miss Hannah Chickering of Dedham, who devoted thirty years of her life wholly to labors in prisons. She first formed the plan for a reformatory prison for women, under the sole charge of women, and lived to see her plan fully carried out in 1877. She, with other women, of whom Mrs. John Ware was one, petitioned six legislatures,

and labored incessantly to that end, before success was attained. Miss Clara Barton did not then live in Massachusetts, nor was she interested in prisons; but at the earnest request of her friend General Butler, then governor of Massachusetts, she undertook the management of the Sherborne prison for six months, in 1883. As is well known, her noble life-work has been in other fields. Prison management was distasteful and unsuited to her. The present head of that prison has given eleven years of service to the State and to unfortunate women, as a work of mercy; and though she is paid a salary, devotes her time and whole income to benevolent labors. The women who hold such public office are nearly if not quite all far from wishing to take part in the affairs which they think properly belong to men, but are glad to assist the State in aiding the helpless and unfortunate.

There are women who have done a hundredfold more service to his State than those of whom Senator Hoar speaks so kindly, but their names are never before the public. The women who see the danger of an enormous extension of the suffrage have been forced into a publicity which they do not desire, because their protest seems necessary to avert the threatened evil.

Clara Temple Leonard.

The New Treatment of Diphtheria.

THE new anti-toxine treatment of diphtheria promises to prove one of the most important developments of modern medicine, and seems to represent, in a particularly practical and valuable form, the best results of recent bacteriological investigations as to the nature of the infectious diseases. I use the word "development" advisedly in this connection, for the new treatment is not by any means the result of a single empirical observation, or a conclusion reached from a single series of experimental investigations, but is the necessary and logical deduction and practical result arrived at from many series of experimental investigations regarding the infectious diseases. These investigations have been going on for the last seven or eight years, and in order to gain any intelligent conception of the nature of the new treatment, one must know something of the work that has preceded it.

In the early days of modern bacteriology, it was thought that the germs associated with the various diseases were themselves the essential and active agents in the production of the symptoms presented. It was not until the subject had been more deeply investigated that evidence was found to show that the chemical products of bacterial life were really the cause of most of the symptoms characteristic of the different infectious diseases; and that in respect to many of these diseases the chemical poisons could be separated from cultures of the germs grown outside the body. It was further found that when the chemical poisons separated from such cultures were used for the inoculation of animals, not infrequently the same constitutional symptoms were produced as occurred when the germs themselves were introduced, or when the diseases occurred under natural conditions.

It has been long known that in many infectious diseases one attack grants a more or less complete insusceptibility or immunity to future attacks. The same individual rarely has two attacks of smallpox or of

scarlet fever, because the first attack has given a nearly complete immunity from the disease. In some infectious diseases the immunity acquired from a single attack is permanent; in others it is only temporary, lasting for a few months, or sometimes perhaps a few years.

Investigations have shown further that the immunity acquired both by animals and man from once having suffered from an infectious disease is at least frequently, if not always, the result of the development in the blood of the individual of some chemical substance (which it has not yet been possible to separate or isolate chemically) that has the power of neutralizing both outside and inside the living body the poison produced by the germs causing that particular disease. Experimental investigations, which have been going on for four or five years, have shown that animals inoculated with the chemical poison or toxine separated from cultures of the diphtheria germ gradually become more and more tolerant of this poison, and finally enormous quantities, many times the fatal dose, may be introduced without causing anything but a temporary disturbance. As the animals become more insusceptible to the action of the poison, the blood acquires to a larger degree the power of neutralizing the poison. It has been further shown that this neutralizing power is due to the formation in the blood of an anti-toxine. When the serum of the blood of animals which have been thus rendered immune to diphtheria is mixed with solutions containing the toxine outside the body, these solutions are deprived of their poisonous property; and when the serum is introduced in sufficient amount underneath the skin of animals, they become insusceptible not only to the action of the toxine of diphtheria, but also to the diphtheria germs themselves; and finally, when used in animals or human beings already suffering from diphtheria, it neutralizes the poison, and cuts short the disease.

In diphtheria death is very commonly due to the action upon the heart or some of the other organs or tissues of the body of the diphtheria poison or toxine which has been absorbed from the throat. The blood serum of animals that have been rendered insusceptible to diphtheria neutralizes the diphtheria poison in the circulation, and so protects the individual from its deleterious action. It acts as a true specific.

It has been found possible in this work accurately to determine the degree of toxic properties of various solutions of the diphtheria poison, and also accurately to determine the value of the blood serum derived from animals which have been rendered immune to diphtheria. Thus a standard of dosage can be easily fixed.

The investigations thus far made would seem to show in the most unmistakable manner that this blood serum, or curative serum as it is called, constitutes almost a certain and specific cure for diphtheria when employed early in the course of the disease; and that almost all persons who are subjected to treatment within the first two or three days recover, whereas before this treatment was instituted, or where it has not been used, the mortality from this disease among children under five years of age has varied from forty to fifty per cent. or more.

Unfortunately, the production of the curative serum is difficult and expensive. From four to ten months are necessary sufficiently to immunize large animals such as horses, cows, or goats, which are chiefly em-

ployed; and the work requires the constant attention of thoroughly trained men. At present this remedy cannot be obtained in this country, or at least only in the smallest quantity and at great expense; and so, although science has provided what seems to be a specific for one of the most dreaded and fatal of diseases, yet it must be some months at least before most persons suffering from diphtheria will be able to avail themselves of its use. The New York City Health Department has asked for a special appropriation for the maintenance of a research laboratory one of the chief functions of which will be the production of the diphtheria anti-toxine; and if this appropriation is granted, it is hoped that before many months the new remedy may be obtained in abundance.

Finally, it may be said that the importance of the diphtheria anti-toxine, or curative serum, in the prevention and treatment of diphtheria can scarcely be overestimated. The remedy has already passed the experimental stage, and its value and efficacy have been thoroughly established. In proper cases it is not only an almost certain cure for diphtheria, but is also apparently an entirely reliable agent for the prevention of this disease, while under all conditions it is absolutely harmless.

The results thus far obtained have been most remarkable. The mortality from diphtheria in children under five years of age has been reduced by the use of anti-toxine in suitable cases from 50 or 60 per cent. to from 10 to 20 per cent. During September the mortality in the hospitals of Berlin was reduced by this treatment to 11 per cent. In October the supply of anti-toxine was exhausted, no more could be obtained, and immediately the mortality increased to nearly 60 per cent.—the previous rate.

The influence of the use of this agent on the death-rate from diphtheria in Paris constitutes in my opinion an exhibit of the saving of life by a new remedy so extraordinary as to be without a parallel in the history of medicine. In the fourth week of September the deaths from diphtheria in the whole city of Paris, with 2,500,000 inhabitants, numbered only two; and in the month of October the mortality for the city to the 27th inst. was only twenty-three.

No such result has ever before been obtained. It seems entirely probable that through the influence of the anti-toxine on the prevention and cure of diphtheria, this disease may eventually be brought completely under control.

Hermann M. Biggs.

A Cure for the Pass Pestilence.

THE anti-pass amendment to the constitution of New York, which virtually prohibits passes to officials, is a much-needed reform. Probably at first view it is notable for the financial effect it will have on the great railroads, every one of which has had a habit of being courteous in the matter of passes to public officials. It was not alone to the legislators that this courtesy was extended. Governors, minor State officers, the highest judges, in many cases the municipal officers of cities, and, as an acme of the thrift that founded the courtesy (although it sounds like a burlesque), coroners and coroners' clerks all along the railroad lines, have been regular recipients of this courtesy as apparently a mat-