

good results have been obtained. The doses used with us are 500 to 2,000 units for infants and 1,000 to 3,000 for adults. The serum is tried on rabbits and horses before it is placed on the market. Repeated attacks in the same patient have been noted in several cases. In one lad there was fourfold recurrence. This was the largest number of recurrences noted. The shortest interval before recurrence after dismissal was seventeen days.

Vaccination Under Red Light.

By order of the board of health a number of babies will, during the next vaccination period, be vaccinated "under red light," according to the views of Dr. Goldmann, who has systematically worked out the method and whose results are very encouraging, as mentioned previously in THE JOURNAL. The vaccination office is furnished with glass windows of a dark-red hue, like those for a photographer's dark chamber, and the small aseptic bandages will also be dyed red with fuchsin. The mothers will be cautioned against undoing the bandages, and to insure absolute absence of any other light than red falling on the wound a red sleeve will be provided for the vaccinated arm. It is planned to compare the results obtained thus with those of the ordinary method. Dr. Goldmann claims for his method the advantage of freedom from unpleasant swellings, the absence of fever, very flat, not disfiguring scars and a milder and shorter course of the infection.

Correspondence

Disinfection with Formaldehyd.

SPRINGFIELD, Aug. 13, 1906.

To the Editor:—In THE JOURNAL, July 28, page 288, under the above caption, Dr. Henry Albert refers to an article appearing in THE JOURNAL, July 14, page 139, concerning experiments made by the Illinois Board of Health. Dr. Albert says of the potassium permanganate method of liberating gas: "It is impossible to evaporate a pint of the 40 per cent. solution of formaldehyd with 3½ oz. of potassium permanganate. To do this it will require from 6 to 6½ oz., and with the use of any less the disinfection, I am sure, will not be satisfactory."

I have not found this to be the case. In many experiments conducted by the Illinois State Board of Health during the past year with this method of disinfection it has been found that while 3½ oz. of the permanganate would not fully evaporate 16 oz. of the 40 per cent. solution of formaldehyd, a satisfactory disinfection could be obtained when these amounts were employed for every 1,000 cubic feet of room space.

There is no doubt, however, that almost complete evaporation can be obtained with the quantities recommended by Dr. Albert, namely, from 8½ to 20 oz., or practically 7 oz. of the permanganate to a pint of the formaldehyd solution, and doubtless it would be better to use these quantities.

The apparatus employed in the experiments and in the practical disinfection work of the Illinois State Board of Health is the tin, asbestos-covered vessel, recommended by the Maine State Board of Health. In this connection, I desire to say that I am unable to find any advantage in heating the vessel in which the disinfecting agents are placed if the vessel used be covered with asbestos or otherwise prepared for the retention of the heat generated by the agents in combination.

I fully agree with Dr. Albert that the potassium permanganate method of liberating formaldehyd gas is the best method now available. In fact, it is the only method of aerial disinfection now recommended to health authorities and physicians by the Illinois State Board of Health.

JAMES A. EGAN,
Secretary, Illinois State Board of Health.

Hay-Fever Treatment by Dunbar's Remedies (Pollantin).

BUFFALO, N. Y., Aug. 6, 1906.

To the Editor:—In regard to Dr. Ingals' letter in THE JOURNAL, August 4: I used pollantin to some extent last year, with very satisfactory results. In every case the symptoms were relieved and could be kept away by repeated insufflation. One patient who had a severe type of hay fever, involving eyes,

nose, throat and bronchi, wrote me from out of town that the drug was no good, his cure only lasted while he was using the powder. All that can be claimed for the antitoxin is amelioration, which is a great deal, and will enable a man to stay at home while using the powder.

GEORGE F. COTT.

ATLANTA, GA., Aug. 5, 1906.

To the Editor:—I note with interest the letter from Dr. Ingals in THE JOURNAL, August 4, in reference to the results obtained from the use of pollantin in hay-fever cases. Hay fever seems to be just as frequent in the south as it does in other portions of our country, and I doubt not that it is dependent on the same line of causes. I have used pollantin now for two seasons in a limited number of cases, but must say that I have experienced no decided results one way or the other. I have heard of one or two hay-fever sufferers in our city who have used the remedy with good results, but this I have not been able to verify personally. One or two of my patients thought they at first received some benefit, but later said that it did no more good than other remedies experimented with. Dr. Fitzgerald of Hartford, Conn., claims to cure his hay-fever patients, and so stated at the meeting of the American Medical Association at Atlantic City in 1904, by simply forcing patients to become absolute nose breathers. After a thorough trial of this method, with the hearty coöperation of my patients, I have not been able to secure the results claimed by Dr. Fitzgerald, but I am still waiting for "the light which will lead us out of the darkness and gloom."

DUNBAR ROY, M.D.

DENVER, Aug. 8, 1906.

To the Editor:—Dr. Ingals' communication in THE JOURNAL, August 4, is very timely, and it is refreshing to read an apparently honest report, even though relating unsuccessful results.

Being a hay-fever subject myself, I hailed with delight Professor Dunbar's remedy, especially after it was endorsed by several of our leading American rhinologists. My first experience, about two years ago, was a dismal failure, and, although I persisted in its use, both for myself and for my patients, I was finally obliged to acknowledge its uselessness. I could not, however, dismiss it entirely, but concluded to investigate for myself at headquarters. With this end in view I visited Hamburg during the month of May, 1905, at which time it was my privilege to witness at Professor Dunbar's hands conclusive experiments. These were the more convincing because of the subject experimented on—myself. (Experience reported in *Colorado Medicine*, April, 1906).

Professor Dunbar convinced me that not only had we been using unsuitable antitoxin, but that our dosage and our method of application were not accurate. On my return from abroad it was late in the hay-fever season and the results then obtained, while encouraging, could not be definitely attributed to the pollantin because of the natural disposition for the disappearance of hay fever without treatment at that time of the year.

I was impressed with several important details in the application of this remedy.

First, the antitoxin applicable to spring cases should not be used in the treatment of autumnal cases.

Second, the value of pollantin is increased if it can be used as a prophylactic for several weeks prior to the expected attack.

Third, the dosage must be accurate, governed according to the effect on each individual case and the amount and character of the exposure.

Fourth, it must be accurately applied, and if it is impossible to use the powder as a snuff after the manner of snuff-takers, it should be insufflated by a proper powder blower, or its use preceded by adrenalin.

Bearing these thoughts in mind I began the use of pollantin this year and have at the present time fifteen patients under my care. In not less than twelve has the result been more