

ABSTRACTS.

DIPHTHERIA, &C.

Beck (Bern).—*Serum Syringe*. “Zeitschrift für aerztl Polytechnik,” 1894, No. 11.
 SYRINGE, with antiseptic needles. *Michael.*

Oppenheimer (München).—*Case of Septic Diphtheria treated by Behring's Serum; Death*. “Münchener Med. Woch.,” 1894, No. 43.

A CHILD, four and a half years old, suffering from diphtheria, was treated with Behring's serum. The case was complicated by suppuration of the glands of the neck and nephritis. Death occurred from failure of heart. The author believes that the case was one of septic diphtheria, and that the death was in no way related to the treatment. *Michael.*

Wallstein.—*Modern Treatment of Diphtheria by Heilserum*. (“Das Heilserum und die moderne Behandlung der Diphtherie.”) Berlin: Cassirer und Danziger, 1894.

A POPULAR review of this subject.

Michael.

Kobrynsky (Kolomea).—*Diphtheria Serum Treatment from the Standpoint of a Practical Physician*. “Allg. Wiener Med. Zeitung,” 1894, No. 46.

THE results of the serum treatment are so little different from that of other treatments that we have no proof of its advantages, as now we have had a mild epidemic of diphtheria. The practical physician will do better to avoid the applications of such speculative medications. *Michael.*

Lublinski (Berlin).—*Accidental Effect of Diphtheria Antitoxin*. “Deutsche Med. Woch.,” 1894, No. 45.

A CASE of medium gravity was treated by Behring's antitoxin. Ten days after the commencement of the disease there suddenly occurred an exanthema on the skin, with pains in the joints, and high fever. The symptoms disappeared in a short time. The case was cured. The exanthema must be regarded as erythema exudatione multiforme. *Michael.*

Technique of Treatment with Heilserum. “Wiener Med. Presse,” Oct. 7, 1894.

THE injection of the serum should be made through the skin of the thorax with Koch's balloon syringe, with careful antiseptic precautions. *Michael.*

Sibbert (Frankfurt-a-Main.) — *Communications on Diphtheria Heilserum*. “Deutsche Med. Woch.,” 1894, No. 49.

THE author, who produces the serum, recommends those who publish their results to state in their publication the number of the bottle applied (every bottle has its manufacture number), so that the control of the observations can be improved.

Michael.

Buchner (München).—*Serum Treatment of Diphtheria*. “Münchener Med. Woch.,” 1894, No. 45.

REPORT on the papers of Behring (see the report in this Journal), and recommendation of early treatment with the immunizing serum. *Michael.*

Hager (Magdeburg).—*Application of Diphtheria Heilserum.* "Centrallbl. für Innere Med.," Dec. 1, 1894.

OF twenty-five cases (ten grave), only one died. Twenty-four hours after application most of the patients were in good health. No disadvantageous symptom was observed. The author recommends the treatment. *Michael.*

Scholz (Hirschberg).—*Accidental Effect of Heilserum Treatment in Diphtheria.* "Deutsche Med. Woch.," 1894, No. 46.

THE son of the author, ten years old, became feverish for two days, and then had membranes on both tonsils. The author performed injection of antitoxin. One day later, temperature was normal. The membranes disappeared three days later. The author also performed a prophylactic inoculation upon his daughter six years old. Three days later this child also had diphtheria, but it was a slight case. Both children ten days after the inoculation suffered from urticaria and pains in the joints. The author believes that the exanthem was caused by the injection.

Michael.

Strahlmann (Wildeshausen).—*Diphtheria Heilserum.* "Allg. Med. Centralztg.," Nov. 7, 1894.

OF over one hundred cases treated by Heilserum, not one has died. The author concludes that the invention of Heilserum is one of the greatest progressive steps in medicine. *Michael.*

Kuntze (Oschersleben).—*Contribution to the Treatment of Diphtheria by Heilserum.* "Deutsche Med. Woch.," 1894, No. 49.

OF twenty-five cases treated with serum, twenty-two (eighty-eight per cent.) have been cured. Of five cases tracheotomized, two have been cured. *Michael.*

Heubner (Berlin).—*Practical Remarks on the Treatment of Diphtheria by Antitoxin.* "Deutsche Med. Woch.," 1894, No. 36.

THE author uses Koch's balloon syringe. The condition of the glands, of the kidneys, and of the circulation, and the temperature are to be carefully watched during treatment. *Michael.*

Buchner, Ranke and Seitz.—*Treatment of Diphtheria with Heilserum.* Gemeinschaftliche Sitzung des aertlichen Vereins und des aertlichen Bazisverein's München, Meeting, Oct. 27, 1894.

SEE the reports in this number. Discussion on these papers:—

OERTEL remarked that it will not be possible to obtain results in most of the cases complicated by sepsis, caused by streptococci; the spreading of the membranes also cannot be prevented by the serum. The origin of albuminuria, or its increase, is caused by the introduction of an albumen-containing-fluid into the veins. The author concluded that the treatment should be applied, but that local disinfecting treatment should not be neglected.

BOLLINGER reported on some *post-mortem* examinations of cases treated by serum, concluding that the observed pneumonias have no relation to the treatment, and that it can be applied without damage.

AUB (chairman) concluded that it is very difficult to judge of the value of the new treatment by statistics, because the mortality of the disease is very different in different epidemics. The experiments should first be performed in clinical and polyclinical institutes, and practical physicians who use the method should communicate their experiences. *Michael.*

Seitz (München).—*Treatment of Diphtheria with Serum.* "Münchener Med. Woch.," 1894, No. 45.

OF eight children preventively inoculated with serum not one has got diphtheria.
Michael.

Rumpf.—*On the Treatment of Diphtheria by Behring's Serum.* Aertzlicher Verein in Hamburg, Meeting, Nov. 13, 1894.

THIS has been applied in twenty-six cases of children from ten months to twelve years of age. Seven have been tracheotomized, and of these two have died. Of ninety-one cases treated in other ways eleven (twelve per cent.) have died. But there are great differences in the mortality for the last few years; in both hospitals from thirteen to fifty-two per cent.
Michael.

Börger.—*The Results obtained by Treatment of Diphtheria by Heilserum.* Greifswalder medizinischer Verein, Meeting, Nov. 3, 1894.

SEE the report in this number.

Michael.

Bokay.—*Treatment of Diphtheria by Behring's Serum.* "Königlicher Verein der Aerzte in Budapest, Meeting, Nov. 3, 1894. (See the report in this number of the Journal.)

PERTIK described Roux's method of fabrication of the serum, and gave some historical notes on the discovery of the bactericidal power of blood-serum, first described by Fodor in 1877.

GROSZ remarked that intubation and serum treatment can both be applied in private practice with great advantage.

HÖGYES believed that a definite judgment as to the value of diphtheria treatment by serum cannot yet be given.

GERLOCZY had not observed favourable results in the Rochusspital. Of fourteen cases seven died, and the seven cured were only very slight cases.

BEHRENDT believed that the serum treatment would shorten the time of infection of diphtheria.

SZEEKAS believed that local treatment is without advantage.

SZEGO believed that local treatment is of great advantage.

FODOR concluded the discussion with some remarks on inoculation of infectious diseases in animals.
Michael.

Kuprianow (Greifswald).—*Experimental Contributions on Immunity against Diphtheria.* "Centralbl. für Bacteriologie," 1894, Nos. 10 and 11.

BACTERIOLOGICAL examinations, giving similar results to those of Behring. Details must be seen in the original.
Michael.

Heubner (Berlin).—*On the use of Heilserum in Diphtheria.* "Jahresschrift für Kinderheilkunde," Band 38, Heft 2 and 3.

IN the clinic at Leipzig there were treated without serum, during part of 1891 and all 1892, 113 cases, with a mortality of 64·6 per cent.; during 1893, 118 cases, with mortality of 45 per cent.; in 1894, 129 cases, with mortality of 42·6 per cent. The use of serum did not influence the number of operations required, or the mortality in tracheotomized or untracheotomized cases. The severity of the epidemic was greatest in 1891-92, less in 1892-93, and least in the latter half of 1893. The serum first used by the author was inferior to the second lot he obtained. His results were, with first serum, 40 cases treated, 21 deaths (52·5 per cent. mortality); with second serum, 39 cases treated, 14 deaths (35·9 per cent. mortality). The author is in favour of the serum treatment.
Michael.

Ranke (München). — *Serum Treatment of Diphtheria.* “Münchener Med. Woch.,” 1894, No. 45.

IN the years 1889-93 the mortality of grave cases of diphtheria was fifty-nine (seventy-one per cent.). During the last winter the author treated eight cases with serum; seven of them have died. In the fatal cases there often occurred an unusual form of pneumonia; it was not possible to say if it had any relation to the injections. The experiments were now interrupted. From 1st May to 27th September, 1894, of sixty-four diphtheritic children, forty-three have died, equal to sixty-seven per cent. (!) Of thirty-two children intubated, thirty (!) have died. The author has never observed such a high mortality. Of nine cases treated by Ahronson's serum, one only has died. Of ten children also treated latterly with Behring's serum, only one has died. *Michael.*

Kossel (Berlin). — *Behandlung der Diphtherie mit Behring's Heilserum.* (“Treatment of Diphtheria with Behring's Heilserum.”) Berlin: Karger. 1895. 39 pp.

REVIEW.

Michael.

Landen, R.—*Geschichte des Diphtherie-heilserum Behrings.* (“History of the Diphtheria-heilserum of Behring.”) München: Seitz und Schauer. 1894. 23 pp.

REVIEW.

Michael.

Schuler (Berlin).—*Experiences in Practice with Ahronson's Antitoxin in the Treatment of Diphtheria.* “Allg. Med. Centralztg.,” Nov. 3, 1894.

IN a girls' asylum in Berlin, of sixty-five subjects, twelve were affected by diphtheria. The other fifty-three were prophylactically inoculated by Ahronson's antitoxin. Of those only one was affected. The patients were not isolated. Of thirty-two diphtheria patients treated with serum, only one died. The local treatment only consisted in inhalation of salt solution. The author believes that it will now be possible to cure a greater number of patients than before. *Michael.*

Körte (Berlin).—*Report on the Results of Diphtheria Treatment with Behring's Heilserum in the Städtische Krankenhaus am Urban.* “Deutsche Med. Woch.,” 1894, No. 45.

OF 132 children treated with heilserum, 81 (66·9 per cent.) have been cured. The whole mortality for the year 1893 was 54·9 cures. Of 106 cases treated during the same time without Heilserum, 53·8 per cent. have died. Of 42 tracheotomized cases treated by Heilserum, 47·6 per cent. have been cured. During the year 1893 (without serum), 22·5 per cent. were cured. Of 43 grave cases, 41·8 per cent. were cured; of 47 medium cases, 70·2 per cent.; of 31 slight cases, 96·7 per cent. So much the larger was the initial dose the better were the results, and also the earlier the treatment was begun. Ill effects by the treatment were not observed. The influence on the general condition was favourable. *Michael.*

Kossel (Berlin).—*On Serum Treatment of Diphtheria.* “Deutsche Med. Woch.,” 1894, No. 43.

REPORT on this method in the Institut für Infektionskrankheiten in Berlin. The mortality was sixteen per cent. The effect of treatment was a hastening of the disappearance of membrane, and a reduction of temperature. Symptoms of intoxication were not observed. Scarlatinal and septic cases were not influenced. *Michael.*

Emmerich (München).—*Remarks on the Serum Treatment of Diphtheria in München.* "Münchener Med. Woch.," 1894, No. 45.

OF twelve bacteriologically examined fatal cases of diphtheria, in ten cases Loeffler's bacilli were found, but in nine cases, as cause of death, invasion of streptococcus was found. This result proves that in most cases the streptococcus is the cause of the fatal ending, and as the serum has no influence on this micro-organism, the chance of an effective treatment of diphtheria by the serum is so much lessened.

Michael.

Bokay.—*Results of Treatment with Behring's Heilserum in the Diphtheria Wards of the Stephanie, Kinderhospital.* Königlicher Verein der Aerzte in Budapest, Meeting, Oct. 27, 1894.

OF thirty-five cases, five (fourteen per cent.) have died. His experiments prove that Heilserum is an effective remedy. There sometimes arises urticaria after the injection. Tracheotomy and intubation cannot be avoided through the use of serum. In cases of septic complications, the serum is without effect. Organic affections of the heart and paralysis cannot be prevented by this treatment.

Michael.

Möller (Magdeburg-Altstadt).—*Short Remarks on the Results with Heilserum in the Diphtheria Station of the Hospital Magdeburg-Altstadt.* "Centralbl. für Innere Med.," Dec. 1, 1894.

THE mortality of tracheotomized cases of diphtheria was in the year 1888 fifty-nine per cent.; 1890, fifty-seven per cent.; 1891, 51·5 per cent.; 1892, 48·6 per cent.; 1893, sixty-three per cent.; 1894, sixty-four per cent. During the latter months it was 55·6 per cent. in cases without, and 39·6 per cent. in cases treated with Heilserum. There has never before been such a small mortality, but variations have always been observed. Urticaria and albuminuria have sometimes been observed.

Michael.

Börger (Greifswald).—*Results obtained by Treatment of Diphtheria with Heilserum in the Greifswalder medicin. Klinik.* "Deutsche Med. Woch.," 1894, No. 49.

OF thirty cases of diphtheria, twenty-eight have been cured; of five cases tracheotomized, one has died. Of three hundred and thirteen cases of diphtheria treated during the last year (without Heilserum), forty-six (fourteen per cent.) have died. This is nearly the same proportion. The author says that he was very well satisfied with the results of the Heilserum, and that it has no toxic effects, but he states that the temperature ascends, urticaria arises, and diphtheritic paralyses, heart symptoms, pneumonias and albuminurias often follow its application.

Michael.

Moizard and Perregaux.—*Two hundred and thirty-one Cases of Diphtheria treated by Antitoxin.* "Bull. Médical," December 9, 1894.

THE authors give in this pamphlet the statistical results of the treatment of diphtheria by antitoxin during the months of October and November in the Trousseau hospital. Three hundred and two children were admitted with angina or laryngitis. The bacteriological culture was negative in fifty-three, who had simple angina; eighteen children are not noted in the statistics, being still in the hospital. In the remaining two hundred and thirty-one cases occurred only thirty-four deaths (14·71 per cent.). The authors have included in this number nine cases of children affected during the first few hours after admission into the hospital. (a) Pure diphtheritic anginas, forty-four cases, two deaths; (b) diphtheritic anginas with mixed bacterial associations (staphylococcus, streptococcus) forty-two cases,

six deaths; (c) diphtheritic laryngitis, ninety-four cases, seventeen deaths; (d) diphtheritic laryngitis with other microbes, fifty-one cases, nine deaths. Tracheotomy was performed thirty times, with twelve deaths; intubation, eighteen times, with seven deaths. Six times tracheotomy was performed after intubation. The injection of Roux's serum is without danger, but it is sometimes accompanied by cutaneous eruptions. The authors have observed fourteen cases of urticaria, nine of scarlatinous erythema, nine of polymorphous erythemas, and one of purpura.

A. Cartaz.

Loeffler (Greifswald).—*On Diphtheria. Explanation of the German Theses at the Seventh International Congress for Hygiene in Budapest.* 1894.

"Deutsche Med. Woch.," 1894, No. 47.

I. *The Cause of Diphtheria is the Diphtheria Bacillus.* Since it became possible to detect the bacillus in the membranes of diphtheritics, living and dead, and to produce diphtheria by it in animals, and to produce an antitoxin by aid of this bacillus, it is certain that it is the cause of the disease. II. *Clinical Cases resembling Diphtheria, but without the Bacillus, must be regarded as quite heterogeneous.* All cases should be examined bacteriologically (13). Those cases without bacteriological examination cannot be used in statistics; neither can the cases of death, because in some regions non-diphtheritic croup has a great mortality. III. *The Gravity of the different Epidemics is variable.* The cause of this fact is not yet known, but it is possible that the cases become more severe by mixed infection with streptococci. The streptococcal infections cannot be favourably influenced by Heilserum. It is, therefore, necessary that cases should be treated locally and prophylactically (14) with bactericidal applications, not only in the interest of the patients, but also (8) because portions of the membranes can infect others. In convalescents, bacilli are often found for a long time; it is, therefore, necessary that they should be examined for a long time (14). In many healthy persons the bacillus is found on the tonsils and in the pharynx without any danger to the patient. An exact explanation of this fact is not yet known, but it is possible that they are not accepted by a healthy mucous membrane. For the other theses no special explanation is necessary.

Michael.

Heming (Konigsberg-i-Pr.)—*Diphtheria and Croup in East Prussia.* "Deutsche Med. Zeitung," 1894, No. 97.

THE author has treated one thousand seven hundred and seventy-four cases of diphtheria in ten years, with fifty-four (three per cent.) deaths. He recommends treatment with ice and gargling with aqua calcis.

Michael.

Orth (Göttingen).—*History of Diphtheria and other Infectious Diseases.* Arbeiten aus dem path. Institut in Göttingen, 1893.

POLEMICAL article on Behring's history of diphtheria.

Michael.

Nicolle.—*Diagnosis and Treatment of Diphtheria.* "Normandie Médicale," Nov. 15, 1894.

A REVIEW of the recent works of Roux, Martin, and others upon the diagnosis of diphtheria and sero-therapy.

A. Cartaz.

Feer (Basel).—*Predisposition and Exciting Causes of Infection during the Earliest Years of Life for Diphtheria and other Infectious Diseases.* "Correspl. für Schweitzer Aertze," 1894, No. 22.

DURING the first year of life the disposition for the acquisition of infectious diseases, such as scarlet fever, measles, whooping-cough, and diphtheria is very small, but

in the second year of life the morbidity of these diseases ascends more and more, and then falls some years later. Krieger explains this by the theory that from recurrent catarrhs of the air-passages during the first year of life the predisposition to disease is increased. In diphtheria the author believes that infants are not so often infected because they cannot move themselves freely. As soon as free movement of the children increases they have opportunity to touch everything and keep their fingers in their mouths, bringing infective material into the mouth and nose, and so acquire disease. If in children less than one year old diphtheria arise, it is usually in the form of nasal diphtheria by infection from handkerchiefs used. To avoid these infections the author proposes to collect children in a "Schutzpferch" (a protected apartment), which can be kept clean by filling with clean linen. Boys are more predisposed to acquisition of infective diseases because the activity of their muscles arises earlier, and the opportunities of infection are thereby greater than in girls.

Michael.

Kohn, Emanuel (Wien).—*Diphtheria and School Hygiene.* "Wiener Klin. Woch.," 1894, Nos. 33 and 34.

EVERY child ought to gargle every day with permanganate of potassium. *Michael.*

Loeffler.—*Popular Advice on Diphtheria by the Sanitäts Commission in Greifswald.* "Deutsche Med. Woch.," 1894, No. 47.

DESCRIPTION of the disease and of its dangers. Recommendation of early treatment and of medical treatment also for slight diseases of the throat; strict isolation of the patient; disinfection of all that is used by the patient by boiling water; disinfection of the patient and the nurses by corrosive sublimate.

Michael.

Plant (Leipzig).—*Studies in Facterial Diagnosis of Diphtheria and Angina.* "Deutsche Med. Woch.," 1894, No. 49.

IN some cases of angina the author always found Miller's spirochæta in great masses. He therefore believes that this micro-organism is the cause of angina. Bacteriological details are given in the original.

Michael.

Pauli (Lübeck).—*The Standard of Treatment of Diphtheria. New Communications on Diphtheria.* "Therap. Monats.," 1894, Nos. 9 and 10.

REVIEW of the new publications, especially upon the results of serum therapy.

Michael.

Concetti (Rome).—*Observations on the Pathogenesis and Treatment of Diphtheria.* "Allg. Wiener Med. Zeitung," 1894, No. 46.

A LONG paper without bringing forward anything new. The author recommends local treatment, and has thus obtained a mortality of twenty-five per cent., and by serum treatment 22·5 per cent. He hopes that by combination of both methods the results will be better.

Michael.

Behrend (Budapest).—*Hemiplegia following Diphtheria* (Archiv für Kinderheilk.," Band 17, Heft 5, 6.

A PATIENT, six years of age, suffering from diphtheria, was attacked, four days after its onset, with vomiting, stupor, and clonic spasms of the left extremities. This was followed by paralysis of the left side (including left half of face). Embolism of the arteria fossæ sylvii was diagnosed. Fourteen days later death occurred from paralysis of heart. At the *post-mortem* there was found a thrombus of the arteria fossæ sylvii four centimètres long, and degeneration of the heart.

Michael.

Wright and Emerson (Boston).—*On the Existence of the Bacillus Diphtheriæ outside the Human Body.* "Centralbl. für Bacteriologie und Parasitenkunde," 1894, Nos. 10 and 11.

THE authors have performed bacteriological researches in the diphtheria wards of the Boston City Hospital, and were able to find Loeffler's bacilli in a brush used for cleansing the chamber and on the shoes of a nurse. *Michael.*

Desseaux.—*A slight Epidemic of Diphtheria in St. Vaast du Val.* "Normandie Méd.," Jan. 1, 1895.

REPORT of thirteen cases of diphtheria, three of laryngitis, three deaths; ten cases of angina, ten cured—three by sublimate glycerine, seven by antitoxin injections. *A. Cartaz.*

Hutinel.—*Prophylaxis of Diphtheria in Hôpital Enfants Assistés.*

DESCRIPTIVE relation of the principal means (disinfection, isolation, etc.) employed in this hospital for the prevention and spread of diphtheria. *A. Cartaz.*

Sevestre.—*Prophylaxis of Diphtheria in Hôpital Enfants Assistés.* "Revue Mens. Maladies de l'Enfance," Oct. and Nov., 1894.

POLEMICAL note on the same subject. *A. Cartaz.*

Solbrig.—*Prophylaxis of Diphtheria.* "Vierteljahresschrift für Gesichtl. Medizin," 1894, No. 2.

THE author concludes that physicians, teachers, householders, and parents should be obliged to report every case of diphtheria. The patients should be isolated and removed to the hospital. Brothers and sisters of infected children should not go to school. Disinfection with sublimate to be compulsory. After death from diphtheria the bodies to be taken to mortuaries, no contact with them to be allowed, and conveyance of them by railway to be prohibited. Lastly, there should be State control of railways and other public conveyances, and also of the sale of food, of milk and cheese. Improvement of the standard of hygiene is also demanded. *Michael.*

Fürst.—*Systematic Prophylaxis of Diphtheria.* (Wien, 1894.) 36 pp.

POPULAR review of this subject without anything new. *Michael.*

Schaug (Dresden).—*Etiology of Diphtheria.* "Deutsche Med. Woch.," 1894, No. 49.

THE author has examined a case of xerosis conjunctivæ, and has found the xerose bacillus. This bacillus is not yet believed to be the cause of xerosis, but an accidental micro-organism. The results of the bacteriological and culture examination of the micro-organism have shown that it is a Loeffler bacillus, with little virulence. *Michael.*

Genersich (Klausenburg).—*Bacteriology of so-called Septic Diphtheria.* "Jahresschrift für Kinderheilkunde," Band 38, Heft 2 and 3.

IN some cases of so-called septic diphtheria, with all the symptoms of true sepsis, the author found Loeffler's bacilli alone, but no streptococci. He therefore objects to the name "septic," which properly denotes an intoxication by streptococci, and proposes the name "toxic diphtheria." He proves that symptoms ordinarily due to streptococci may be produced by pure Loeffler's bacilli. *Michael.*

Catrin.—*Diagnosis of Diphtheritic Angina; Treatment with Permanganate of Potash.* "Bull. Soc. Med. des Hôp.," July 27, 1894.

OF twenty-eight cases of angina treated by the author, eight were true diphtheritic angina. The others were: seven with streptococcus; five with staphylococcus; four with a bacillus similar to Loeffler's bacillus, but not colourable by Gram's method; one with coli-bacillus; one with pneumococcus; one with a large coccus. The eight cases of diphtheria had given a large percentage of mortality. Two cases in adult patients at the period of convalescence on the nineteenth and twenty-third days. The death seemed to be the result of heart failure, after some special symptoms of paresis of the limbs. The author has applied in each case paintings with a solution of permanganate to one in two hundred, and large boracic washes.

A. Cartaz.

Loeffler.—*Local Treatment of Diphtheria.*

SEE the report in this Journal. Discussion on these papers:—

STRUBING: The mixed infections of streptococci and Loeffler's bacilli are more deleterious than those of Loeffler's bacilli alone. The diphtheroid infections produced by streptococci are in most cases comparatively harmless, but in some cases the patient becomes septic. The author recommends Loeffler's local treatment, and believes that by it a great many cases are favourably influenced.

FENDERICH gave the statistics of Helferich's clinic from 1887 to 1894. Of one hundred and ninety-nine cases, one hundred and fourteen (fifty-seven per cent.) died. Of one hundred and fifty-three cases tracheotomized, one hundred (sixty-five per cent.) died.

BEUMER has treated two cases with good results, and hopes that Behring's Heilserum will fulfil expectations.

PEIPER has treated three cases; one of them had nephritis and pharyngeal paralysis.

LOEFFLER believes that virulent bacilli in the mouths of healthy persons or convalescents can spread the disease.

ABEL: On the immunizing power of Heilserum. (See the report in this number.)

Michael.

Wiemer (Apenrade).—*Local Treatment of Diphtheria.* "Deutsche Med. Zeitung," 1894, No. 90.

THE author recommends irrigation of the naso-pharynx with sterilized water and insufflations of dermatol powder.

Michael.

Loeffler (Greifswald).—*Local Treatment of Pharyngeal Diphtheria.* "Deutsche Med. Woch.," 1894, No. 42.

THE author has made a great many experiments on the effect of antiseptic medicaments on diphtheria bacillus, and has found the following mixture act best, viz.—alcohol 60, taluol 36, liq. ferri 4. In seventy-one cases in private practice in which Strubing used this, applying it every four hours and commencing on the first day of illness, there were no deaths. Of thirty hospital patients similarly treated five died. The application is painful, therefore Strubing adds a ten per cent. solution of menthol.

Michael.

Wallé (Wandersleben).—*Treatment of Diphtheria by Salaktol.* "Deutsche Med. Zeitung," 1894, No. 92.

THE author has treated some cases by local brushing with salaktol with good results, and recommends this treatment.

Michael.

Feige (Niesky).—*Treatment of Diphtheria.* "Therap. Monats.," 1894, No. 7.

RECOMMENDS treatment by liquor ferri.

Michael.

Goldschmidt, D.—*Internal Administration of Perchloride of Iron in Diphtheria.* "Revue de Médecine," Oct., 1894.

THE author advocates as the best treatment of diphtheria the internal use of perchloride of iron solution, one per twenty distilled water. He records thirty-eight cases, with two deaths. *A. Cartaz.*

König (Hermannstadt).—*Treatment of Scarlatinal Diphtheria.* "Internat. Klin. Rundschau," 1894, No. 45.

THE author recommends internal stimulating treatment without local applications. While he applied local applications he had fifty per cent., and now has only 8·10 per cent. mortality. *Michael.*

Ritter (Berlin).—*Treatment of Diphtheria.* "Therap. Monats.," 1894, No. 7.

COMMUNICATION on experiments on the effects of antiseptics on the Loeffler bacillus, and recommendation of treatment by cyanide of mercury. *Michael.*

Hagen (Berlin).—*The First Twelve Years of the Diphtheria Institution in Bethanien, with some Introductory Remarks and some Concluding Remarks by Dr. Edmund Rose.* "Deutsche Zeitsch. für Chir.," Band 39, Heft 3 and 4.

OF one thousand nine hundred and twenty-nine tracheotomized children, seventy-one per cent. died. Of one thousand seven hundred and sixty-five not operated upon, twenty-six per cent. died. The details must be seen in the original. The greatest mortality occurred during the autumn, the least in summer. A maximum of cases of disease corresponds to a minimum percentage of cures, and *vice versa*. Simple laryngeal croup gave much better results (fifty-two per cent.) than the descending diphtheria of the pharynx. Rose describes the establishment of the diphtheria institution, reviews shortly the history of tracheotomy in the Bethanien hospital, and describes his method of operation. In nearly all cases inferior tracheotomy was performed. He prefers the blunt operation; he operates without narcosis. The after-treatment consists in application of stimulant and nourishing remedies. The operation was performed in all cases of stenosis, even if there was a dangerous complication. *Michael.*

Carstens (Leipzig).—*Method of Intubation in Diphtheritic Laryngeal Stenosis.* "Jahresschr. für Kinderheilkunde," Band 38, Heft 2 and 3.

REPORT of one hundred cases with seventy recoveries. Detailed description of this method of treatment with its advantages and disadvantages. *Michael.*

Cooke, S. P.—*Diphtheria and Diphtheritic Paralysis and their Treatment.* "Montreal Med. Journ.," Nov. 9, 1894.

NOTHING new.

R. Lake.

Rosenthal, E.—*Intubation in Diphtheria. Report of one hundred cases.* "Med. Bull.," Oct., 1894.

THE author describes numerous cases in detail, and gives a full statistical table, from which he draws the following conclusions:—

No.	Age.	Mortality.
3	under 1 year	2
19	between 1 year and 2	17
22	" 2 years and 3	13
23	" 3 " 4	11 (most favourable age.)
22	" 4 " 5	13
8	" 5 " 6	4
3	6 years old	2
Total 100		Total 62

The indications are those for tracheotomy. The author advises intubation under four years; intubation followed, if required, by tracheotomy between four and seven years; tracheotomy is indicated when loose membrane is present in the trachea; intubation always in poor patients. The younger the child the longer will the tube be required, and it should be removed for severe recurrent dyspnoea, and high temperature, with bronchitis, on the third day. *R. Lake.*

Fischer (Hanover).—*Tracheotomy in Diphtheria.* “*Deutsche Zeitsch. für Chir.*,” Band 39, Heft 3 and 4.

THE author reports upon an experience of one thousand cases, and states that the operation with blunt hooks is the best method. After having cut the skin with a bistoury only, the hooks are applied to divide the soft parts. In this manner it is possible to avoid hæmorrhage. Scarcely ever was a ligature necessary. He prefers high tracheotomy. He uses Luer’s canula at first, and during the later days a canula with dorsal hole. He also gives his statistics. Of his one thousand cases, forty-one per cent. were cured. Of cases of diphtheria without tracheotomy, sixty-seven per cent. were cured. *Michael.*

Durno (Stoke Newington).—*A Case of Diphtherial Laryngitis in a Child eighteen months old, in which Tracheotomy was followed by Recovery.* “*Brit. Med. Journ.*,” July 21, 1894.

THERE was pharyngeal infection as well, and the cervical glands on each side were very much swollen. On the fifth day, lung complications setting in, tracheotomy was performed. Hæmorrhage being great, the child was turned on his face after the trachea was entered. This step soon arrested the hæmorrhage. The tube was removed on the ninth day after operation for the first time, but had to be reinserted from time to time until the thirteenth day, when it was finally dispensed with. Child well on the eighteenth day after the operation. *Wm. Robertson.*

Roux, E., and Martin, L.—*Contribution to the Study of Diphtheria (Sero-therapy).* “*Ann. Inst. Pasteur*,” Sept. 29, 1894.

DETAILED review of the method of preparation of antitoxin. With the culture of the pure diphtheritic bacillus in broth, under the influence of humid air at 37° Cent., in one month they can obtain the toxin. The liquid is filtered and kept in bottles, protected from the light. The pure toxin is mixed with (one part to three) Gram’s liquor in order to prevent too toxic action. The horse is the best animal from which to obtain antitoxin; it has a great tolerance for inoculations, which increase in quantity and virulence during two or three months. From twenty cubic centimetres of diphtheritic culture, with iodine, the dose is day by day increased to two hundred or three hundred cubic centimetres. After that period the horse is immunized, and the serum is antitoxic. The quantity of serum obtained is very large at every bleeding—viz., two or three litres. By comparative experiments on guinea-pigs and rabbits the authors have determined the antitoxic power of the serum. With a proportion of one to one hundred thousand of serum to the weight of the animal the immunity is acquired for a dose of toxin fatal to the control of animals. Diphtheria has been inoculated on various animals, and the antitoxin injected. Some hours afterwards, or later, when the injection is sufficient, or made not too late, the disease is rapidly cured. After these repeated experimental researches the inoculation has been tried upon children. *A. Cartaz.*

Levy.—*Serum Treatment in Tetanus and Diphtheria.* *Unterelsässischer Aerztereverein in Strassburg*, Meeting Oct. 27, 1894.

THE paper will be afterwards published in detail.

KRÖLL reported one grave case of diphtheria treated with Heilserum. It was cured.

WICK : Of ten cases treated by serum, not one has died.

KOHTS remarked that we have at present a mild epidemic of diphtheria. Of three hundred and ninety-nine children tracheotomized during the last four years, fifty-six per cent. have been cured. Of two hundred and eighty-three cases of pharyngeal diphtheria, eighty per cent. have been cured. Of nine tracheotomized cases of the same quality, four had Heilserum, and five none. One of the Heilserum cases and one of the others have died; the latter not from diphtheria, but from a tumour of the thymus compressing the trachea under the canula. Up to now no special effect of the Heilserum can be reported.

FLOCKEN recommended the treatment of diphtheria by calomel. Local treatment is unfavourable. The results of Heilserum obtained up to now are not encouraging.

RECKLINGHAUSEN remarked that it is impossible to exclude grave cases in diagnosis of diphtheria if bacilli are not found; the diagnosis must be a clinical, not a bacteriological one.

NAUNYER hoped that the serum will be as effective in the human subject as it is in animals.

Michael.

Behring (Halle).—*The Question of Immunity against Diphtheria.* “*Deutsche Med. Woch.*,” 1894, No. 46.

To obtain immunity, the fourth part of the therapeutic dose should be injected as the author says—one hundred and fifty “immunizing units”- but it cannot be stated with certainty that by this method all infection can be avoided. In children inoculated with sixty “immunizing units” the author has observed eruption of diphtheria some days after the inoculation. The protective effect of the inoculation increases with the number of “immunizing units.” The protective effect is greater if from time to time smaller quantities are inoculated than if a large quantity is used at once, because the discharge of antitoxin is so much the greater as it circulates more concentrated in the blood, and as greater doses can easily produce suppuration by the movements of the children if the place of injection is irritated.

Michael.

Hilbert.—*Results of the Immunizing and Curative Treatment with Heilserum in the Universitätspoliklinik.* Verein für Wissenschaftliche Heilkunde in Königsberg-i-Pr., Meeting, Nov. 12, 1894.

OF sixty-four immunized children, five had diphtheria (!). Of eleven cases of diphtheria (eight slight cases) not one has died.

FALKENHEIM : Of seventy-five children under his observation treated without heilserum, nine (eleven per cent.) died. Of six cases tracheotomized, three died.

SCHREIBER remarked that in other years also cases which seemed to have an absolutely fatal prognosis have been cured. Sometimes cases which seemed to be simple follicular angina prove their diphtheritic character by the paralyses which follow.

CZAPLEWSKY believed that it is very difficult to give a certain bacteriological diagnosis of septic diphtheria.

Michael.

Maurel.—*Iodoformized Vapours in Acute Coryza and Bronchitis.* Soc. de Therapeut., Nov. 14, 1894.

THE author has had very good results in acute coryza by means of iodoform wool plugs. When bronchitis appears he gives (six times a day) lozenges of iodoform (0.005 milligrammes). This medication is also efficacious in chronic bronchitis, pulmonary tuberculosis and arthritic chronic coryza.

A. Cartaz.

Mattison, J. B.—*Cocaine Poisoning.* “Times and Register,” Nov. 3, 1894.

A GENERAL review of previous discussions and opinions on the subject, with a record of four fatal cases of recent date, all following the use of four per cent. solutions. Two were urethral cases; in one sixty milligrammes, in the other twenty milligrammes was the dose employed. The third was from the application of the same percentage to a blistered surface; the fourth was a rectal case, and the dose was forty milligrammes in two doses with an interval of ten minutes. The symptoms were excitement, convulsions, and death, in the third case all in one minute. Autopsies on the first two showed intense pulmonary congestion.

R. Lake.

Rosenberg (Berlin).—*The use of Cocaine to prevent Respiratory Disturbances during Chloroformization.* “The Med. Week,” Nov. 23, 1894.

THE author states that he has found by experiment that, at the beginning of anaesthesia, if the blood-pressure be considered as equal to 100, the systole is represented by 210, and the diastole by 40. Under normal conditions, on the contrary, the blood-pressure being the same, the systole is represented by 120, and the diastole by 90. These modifications are due to respiratory disturbances consequent upon irritation, by the chloroform, of the mucous membranes of the upper air-passages. To obviate this irritation the mucous membrane of the nose should be anaesthetized with cocaine before the administration of chloroform. By this simple measure the disturbance of respiration and the frequently fatal accidents which follow are prevented. [The Reporter has frequently been able to verify the above, and to remark the ease with which a patient, previously anaesthetized with a two per cent. solution of cocaine and resorcin, takes chloroform. Another equally valuable sequence of such a course—cocaine previous to chloroform—is the greatly diminished loss of blood. In a case *e.g.*, of tonsils and adenoids to be removed, cocaine being painted on each part previous to the administration of chloroform, the tonsils the first to be removed are excised with a minimum loss of blood, scarcely any at all in fact, which facilitates the further removal of the adenoids. This also is notably followed by less hæmorrhage than if the cocaine had not been previously used.—REP.]

Wm. Robertson.

Helme.—*Bromide of Ethyl in Oto-Laryngology.* “Ann. des Mal. de l’Oreille, etc.,” Feb., 1894.

REVIEW of the subject: conclusion—nothing superior to it for operations of short duration.

Joal.

Rehn (Frankfurt-a-M).—*Prussiate of Antipyrin and its Application in Whooping Cough.* “Münchener Med. Woch.,” 1894, No. 46.

THE author has applied the medicament in some cases with good results, and recommends the application.

Michael.

Frühwald (Wien).—*Antispasmin: a New Drug for Whooping Cough.* “Archiv für Kinderheilk.,” Band 18, Heft 1 and 2.

THE writer has applied the new drug (narcocinnatrium-natriumsalicylicum) in sixty-four cases of whooping cough, and observed improvement in a short time.

Michael.

Tobeitz (Graz).—*Prophylaxis and Treatment of Whooping Cough.* “Archiv für Kinderheilk.,” Band 18, Heft 1 and 2.

NOTHING new.

Michael.

Silbermann (Breslau).—*Diseases of the Right Heart following Whooping Cough.* "Archiv für Kinderheilk.," Band 18, Heft 1 and 2.

IN many cases of whooping cough during the attack we can observe weakened action of the heart, consisting in almost abolishing of the heart sounds, and of the pulse with great frequency of the latter up to one hundred and fifty or diminution to fifty to the minute. Sometimes dilatation of the heart can be detected during the attack. In some cases the author has observed dilatation of the right heart, also during the whole time of the disease weakened pulse, albuminuria, and a systolic murmur of the tricuspid valve can be detected. The author relates five cases, four of which are cured. One of the children died in an attack of cough. The *post-mortem* examination showed great dilatation of the right heart.

Michael.

NOSE AND NASO-PHARYNX.

Scheff (Wien).—*Contribution to the Anatomy and Physiology of the Nose—The Path of the Air-Stream in the Nose.* "Internat. Klin. Rundschau," 1894, No. 40.

THE author concludes: In the accessory cavities of the nose differences of pressure occur in sleep respirations which are parallel to those that arise under the same circumstances in the nose itself. If the respirations are very deep the variations are only some millimètres of water, and are never as great as are described by Braune and Clasen (sixty millimètres of mercury or seven hundred and eighty millimètres of water). It is, therefore, certain that the theory of these authors that the accessory cavities have an influence on the direction of the air in the olfactory region cannot be right. Concerning the path of the air-stream through the nose, the author proved, by experiments in the cadaver and by casts of the nose, that the air-stream passes especially through the middle nasal channels. *Michael.*

Raugé—*On the Part played in Phonation by the Nasal Fossæ.* "Ann. des Mal. de l'Oreille," etc., Feb. 1894.

AFTER a careful study of the formation of the vowels and consonants, the author distinguishes between buccal vowels and nasal vowels; the latter are due to the resonance of the sound in the nasal fossæ, while in the former the nasal passages are not employed. Hence he proposes to replace the terms, invented by Kussmaul, of "open" and "closed rhino" by the more natural ones of "rhino" and "stoma." The type of stoma is the dull, extinguished voice of cases of adenoids, first described by Meyer. *Joal.*

Ziem (Danzig).—*Nasal Affections and Infectious Diseases.* "Münchener Med. Woch.," 1894, No. 49.

VERY often infectious diseases are localized in the respiratory organs, especially in the naso-pharynx. The author has observed that in persons who are affected with nasal disorders infections, especially of diphtheria, are more often observed than in persons with healthy noses. He also observed in persons who had disease of one nasal cavity the origin of diphtheria on this side. He, therefore, recommends nasal douches with salt solutions made by Mayer's pressure pump. *Michael.*

Bogdan.—*Massage of Nasal Mucous Membrane.* "Wiener Med. Presse," 1894, No. 2.

RECOMMENDATION of this treatment.

Michael.

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