

ABSTRACTS.

DIPHTHERIA, &C.

Tiburcius (Berlin).—*Attending upon Diphtheria Patients.* “*Zeitsch. für Krank.*,” 1894, No. 12.

RECOMMENDATION of salicylic irrigations and a spray of menthol and camphor. Mechanical removal of the membranes from the tonsils should only be performed if they are so thick that they cause disturbance of respiration. *Michael.*

Schlossmann (Dresden).—*Diphtheria and the Diphtheria Bacillus.* “*Klin. Zeit. und Streitfrage*,” Wien, 1894.

REVIEW, concluding that the Klebs-Loeffler bacillus is the cause of diphtheria. *Michael.*

Kutscher (Giessen).—*Diphtheria Bacilli in the Lungs of Children dead from Diphtheria.* “*Zeitsch. für Hygiene*,” 1894, No. 1.

CONTENTS indicated by the title. *Michael.*

Esmarch (Königsberg).—*Bacteriological Diagnosis in Diphtheria.* “*Deutsche Med. Woch.*,” 1895, No. 1.

THE author proposes to imitate the method introduced in New York (see this Journal). The membranes should be touched with sterilized sponges, and be sent in paper to the Central Institute. *Michael.*

Washbourn and **Hopwood** (London).—*Cases illustrating the Importance of an Examination for the Diphtheritic Bacillus.* “*Brit. Med. Journ.*,” Jan. 10, 1895.

TWO cases of scarlet fever of the acute stage are related, where at the same time a membrane on the tonsils was found to contain typical diphtheria colonies, a result which proves that another opinion—viz., that the membrane which develops on the tonsils in the early stage of scarlet fever is not diphtheritic—is not without exception true. The bacilli in these cases were found in the post-scarlatinal stages of the disease, and might have given rise to other cases in the ward had they not been recognized. The duration of infection in diphtheria was sixty-three days after disappearance of membrane. *Wm. Robertson.*

Bäumler, **Kraske** and **Schottelius.**—*On the Diagnosis and Treatment of Diphtheria.* Verein Freiburger Aerzte, Meeting, Oct. 30, 1894.

OF twenty-six cases treated by Heilserum, two have died. Bäumler has a very favourable impression of the medicament, and believes that it has a favourable influence on the disease. In two cases he has observed after the injection a second eruption of membranes. In some cases albuminuria and erythemata were present.

KRASKE: Of sixteen tracheotomized children, five have died (equivalent to thirty-one per cent.). Without Heilserum, he has had during March a mortality of twenty-five per cent. Erythema and nephritis are sometimes observed, and, as he believes, caused by the treatment.

SCHOTTELIUS showed cultures of diphtheria bacilli.

Michael.

Duffield, G.—*Prophylaxis of Diphtheria.* “Amer. Lancet,” Jan., 1895.

THE progress of the epidemic depends upon three things. (1) The number and virulence of the diphtheria bacilli. (2) The pathogenic or non-pathogenic bacteria associated with the diphtheria bacilli, rendering the organism weaker by their disorganizing products. (3) Individual weakness and carelessness. All forms of prophylaxis are fairly and impartially discussed. *R. Lake.*

Schwalbe (Los Angeles, California).—*The Application of Warm Salt Baths in Febrile Diseases, and especially in Diphtheria.* “Deutsche Med. Zeitung,” 1895, No. 6.

RECOMMENDATION of this treatment.

Michael.

Heubner (Berlin).—*On Abortive Diphtheria.* “Deutsche Med. Woch.,” 1894, No. 50.

REPORT on three cases in which diphtheria complicated other grave general diseases without producing distinct symptoms during life. *Michael.*

Wassermann (Berlin).—*Concentration of Diphtheria Antitoxins of the Milk of Immunized Animals.* “Zeitsch. für Hygiene,” 1894, No. 2.

THE author was able to produce diphtheria antitoxins from the milk of immunized animals, and describes in detail his method of production. *Michael.*

Pasteur (London).—*Association of Respiratory Paralysis with Cardio-Pulmonary Symptoms in Diphtheritic Paralysis.* “Brit. Med. Journ.,” Feb. 2, 1895.

THE remarks referred to an analysis of thirty-two cases, of which nineteen died. Twenty-six of these were between two and six years of age. In nineteen there were bulbar crises. In five cases in which there was paralysis of the diaphragm for two or three days there was an extreme degree of collapse of lung after death. Where the paralysis had been of short duration or non-existent no collapse occurred. The conclusions arrived at were (1) that the mortality in diphtheritic multiple paralysis was higher than admitted; (2) death took place from asphyxia; (3) the fatal symptoms were mostly of sudden onset and suggested a bulbar origin; (4) recovery from a bulbar crisis was exceptional; (5) paralysis of the diaphragm was frequent and might be due to bulbar crisis or part of the peripheral paralysis; (6) the respiratory paralysis seriously increased the gravity of prognosis; (7) where paralysis of the diaphragm was long-continued, collapse of the lung might occur; (8) base of right lung oftenest affected. Dr. Guthrie did not consider that collapse of the lung depended on paralysis of the diaphragm. This might occur without lung collapse. There was no action of the diaphragm in sleep. The muscles of small bronchi were in part dilators, in part constrictors. Pulmonary collapse was due to paralysis of the former. Diphtheritic paralysis was central in origin. Dr. S. Phillips thought that children affected with paralysis of the diaphragm always died. In one of his cases paralysis occurred as late as nine weeks. Many cases of lung collapse were really cases of spasm or paralysis of bronchial tubes.

Wm. Robertson.

Escherich (Graz).—*Etiology and Pathology of Epidemic Diphtheria.* Wien: Holder. 1894. Pp. 294.

REVIEW.

Michael.

Seitz (München).—*The Progress of our Knowledge as to the Nature, Causes, and Treatment of Diphtheria in the last Decennium.* “Münchener Med. Woch.,” 1884, No. 50.

REVIEW.

Michael.

Benesch.—*Pilocarpin Injections in Diphtheria.* "Allg. Wiener Med. Zeitung," 1895, No. 4.

THE author has treated thirty-two cases, which have all been cured. He prefers this method to Heilserum treatment, because the good effect is manifested in a few minutes in decrease of the temperature, and the general results are very satisfactory.

Michael.

Hamilton, Prof. (Aberdeen).—*A Ready Means of Procuring and Transmitting Diphtheritic Discharges for Examination.* "Brit. Med. Journ.," Feb. 9, 1895.

THIS consists of a test tube, to which is adapted a camel-hair brush. The handle of the brush penetrates the tight wad of cotton wool used to close the tube. The whole is sterilized and all the practitioner has to do is to lift up the discharge from the tonsil with the brush, reinsert this and post the box containing the test tube. In this way the discharge is removed by and received in sterilized instruments; 2, the brush is an excellent means for collecting the discharge and does not frighten the patient by its appearance; 3, everything being ready for sending off by post, no time is lost in transmission; 4, the brush is again an excellent instrument for spreading the discharge; and 5, the cost of the apparatus is trifling.

Wm. Robertson.

Sevestre and Méry.—*Persistence of Loeffler's Bacillus in Children cured of Diphtheria.* "Bull. Soc. Méd. des Hôp., Paris," Feb. 8, 1895.

THE authors have studied, from a prophylactic standpoint, the persistence of Loeffler's bacillus in children cured of diphtheria. Bacteriological examination has been practised since the first day of entrance into the hospital, and treatment until some weeks after complete cure of the disease. Not only was frequent bacteriological examination made, but, in order to determine the virulence of the bacillus at the same time, the cultures were inoculated in guinea-pigs.

The researches have been extended to two series of cases, the first treated by ordinary means, carbolic washes, painting the throat with Gaucher's solution or steresol; the second treated by Roux's serum alone, with simple chloride washes. In the first series the diphtheritic bacillus had disappeared with the pseudo-membranes in half of the patients; in the others they found the bacillus more or less late in the throat, and specially in the nose.

In the second series the results are similar. The bacillus was absent (after disappearance of pseudo-membranes) in three cases; was present some days, but less virulent, in four cases; was present and virulent after some days in three cases.

From these results the authors conclude that it is dangerous to permit the discharge of the patient for some weeks. The contagiousness is lasting, and the children supposed to be cured can spread the disease in families and in schools. It is desirable to have some convalescent hospitals or wards for reception of patients until the moment of complete cure—that is to say, the proof of absence of bacilli in the mucous membranes of the throat and nose.

A. Cartaz.

Muehlech, G. A.—*Four Cases of Diphtheria treated by Antitoxin.* "Amer. Lancet," Jan., 1895.

ONE death is recorded to three recoveries.

R. Lake.

Lebreton et Magdelaine.—*Three Months of Serum Treatment and Intubation in the Children's Hospital.* "Bull. Soc. Méd. des Hôpitaux," Feb. 7, 1895.

Two hundred and fifty-eight cases of true diphtheria have been treated during the last three months by serum treatment alone, with simple washings of chloride

water (liqueur de Labarraque) fifty cubic centimètres per thousand. These cases have given thirty-one deaths, of which eight occurred during the first day of entrance into the hospital. Tracheotomy has been necessary twenty-four times, with nine deaths. Fifty-one intubations have been performed, with fourteen deaths. In one hundred and forty-seven cases the diphtheritic bacillus was associated with other microbes and accounted for nineteen of the deaths. The authors relate the same accidents as Roux and Moizard, viz., exanthema and urticaria, and insist on the various phases and complications of intubation.

A. Cartaz.

Perregaux, G.—*Study of 249 Cases of Diphtheria treated by Anti-Diphtheritic Serum.* Thèse de Paris, 1895.

THESE statistics are the reproduction, with some numbers differing, of the statistics of Moizard and Perregaux published in "Bull. Soc. Méd. des Hôp." in December, 1894. Out of 249 cases (with 37 deaths) the author distinguishes 46 true diphtheritic anginas with 2 deaths; 45 associated anginas with 6 deaths; 102 pure diphtheritic laryngitis with 19 deaths; 56 associated diphtheritic laryngitis with 10 deaths. In 39 cases tracheotomy was necessary, and there were 14 deaths; 18 times intubation was practised, 6 times with secondary tracheotomy, with 7 deaths.

The author relates an unusual number of complications of serum treatment; 61 cases of exanthema; 21 of rheumatismal pains or arthritis; 17 cases of soft palate paralysis; but these complications have been, for the most part, noted by the children's parents and not examined by the author. One case is interesting: in a little girl, four years of age, the injection of serum determined severe and repeated attacks of urticaria, with vomitings, oliguria, and collapse. During that period the pseudo-membranes persisted in the throat, but without bacillus. Cure was obtained after some weeks.

A. Cartaz.

Variot.—*Changes in the Temperature and Circulation of the Injections of Anti-Diphtheritic Serum.* "Bull. Soc. Méd. des Hôp.," Mar. 1895.

THE author noted in children treated by the antitoxic serum an increase of temperature (one or two degrees Centigrade) after the injection of twenty cubic centimètres. The antitoxin serum must have an hyperthermic power. It also increases the pulsations of the heart, causing a more rapid circulation, with sometimes cardiac asthenia and pulse arrhythmia. This febrile reaction should be favourable to the cure of the disease. Rendu, in three cases of adults, has not observed any increase of temperature in spite of repeated injections.

A. Cartaz.

Sinson, H.—*Epidemic of Diphtheria in a village; Treatment by Antitoxic Serum.* "La Méd. Moderne," Feb. 6, 1895.

IN the village of Pecy, with seven hundred inhabitants, the author has noted a serious epidemic of diphtheria. During one month eighteen children have been affected, and in many cases the form was severe (angina and laryngitis, with diphtheritic bacillus and association of streptococcus and staphylococcus). Two cases were treated by ordinary methods, with one death; sixteen by serum (Roux's serum), with fourteen cures and two deaths. One of the fatal cases had been injected with serum only during the last stage, being then moribund. The author claims the superiority of the serum treatment over other methods.

A. Cartaz.

Dreyfus, J.—*Serum Treatment at Lyons.* "Lyon Médical," Feb. 3, 1895.

STATISTICS of the cases treated in the children's service from October 15th, 1894, to January 21st, 1895. Seventy-eight cases of diphtheria have been treated by Behring's or Roux's serum. Fifteen deaths have occurred—three from pneumonia,

liarrhoea, and typhoid fever. In thirty-one cases intubation had been necessary and was successful.

A. Cartaz.

Chabry.—*Diphtheria in an Adult cured by Sero-therapy.* "Journ. de Clin. et Thérap. Infantiles," Feb. 21, 1895.

THE author was infected in the diphtheritic children's wards, where he was resident physician. He narrates his own case. Two injections of serum produced rapid cure. Intense erythema and arthritic pains appeared some days after the injection.

A. Cartaz.

Sevestre and Meslay.—*Report of 179 Cases of Diphtheria treated by Sero-therapy.* "Bull. Soc. Méd. des Hôp.," Mar. 1, 1895.

IN the month of December, the authors treated 179 cases; 29 of pseudo-membranous angina. The 150 cases of diphtheria are divided into—

1. Pure diphtheritic anginas: 29 cases, 1 death.
2. Diphtheritic anginas with association of microbes: 24 cases, 3 deaths.
3. Anginas with laryngitis, diphtheria pure: 54 cases, 4 deaths.
4. Anginas with laryngitis, microbic association: 21 cases, 5 deaths.
5. Laryngitis without anginas, diphtheria pure: 13 cases, 2 deaths.
6. Laryngitis without association of anginas: 9 cases, no deaths.

In 18 cases tracheotomy has been necessary; intubation in 9. It is an excellent review of the method of cure, and of the phases of the disease and its complications.

A. Cartaz.

Soltmann (Leipzig).—*Serum Treatment of Diphtheria.* "Deutsche Med. Woch.," 1895, No. 4.

OF one hundred and ninety-three cases treated in 1894, fifty (equivalent to twenty-seven per cent.) died; of seventy-one cases treated without serum, twenty-eight (equivalent to 39·8 per cent.) died; of one hundred and twenty-two treated with serum, twenty-two (equivalent to eighteen per cent.) died. As the epidemic became more malignant the mortality ascended, also in those cases treated by serum (to 35·9 per cent.). Local effects were not observed, and only in a few cases acute defervescence. Of twenty-six cases of albuminuria, nineteen followed the injection directly. In three cases recurrences were observed.

Michael.

Taube (Leipzig).—*On Serum-Therapy.* "Deutsche Med. Woch.," 1895, No. 4.

THE serum treatment should be combined with local treatment, especially with the application of pyoktanin.

Michael.

Kassowitz.—*Discussion on Heilserum Treatment.* Gesellschaft der Aerzte in Wien Meeting, Jan. 18, 1895.

THE experiments on animals cannot be regarded as cures, because without disease there can be no cure. Further, successful experiments on animals cannot prove anything for human diphtheria, either as to its cure or immunity. The good effects observed with the treatment have also been observed without the treatment. Tachycardia, progression of the local symptoms, and other complications, are also observed in serum treatment. As the supporters of this treatment also concede that it can do nothing against the streptococcal invasion, it must in every such case be combined with local treatment. The decrease of mortality does not prove anything because of a larger proportion of slight cases.

Michael.

Horciska (Pola).—*Contribution to the Treatment of Diphtheria by Heilserum.*
 "Wiener Klin. Woch.," 1894, No. 49.

THREE cases treated with good results.

Michael.

Eiermann (Frankfurt-a-M.).—*Description of the Apparatus for Fabrication of Heilserum in "Höchster Farbwerken."* "Münchener Med. Woch.," 1894, No. 51.

PANEGYRIC.

Michael.

Blumenfeld (Leitha).—*Experiences on Heilserum Treatment in Diphtheria.*
 "Wiener Klin. Woch.," 1895, No. 3.

IN most of the cases a good result has been observed as to the progress of the disease. The day after the injection the cases were improved. Complications and after-effects have not been observed. Of fifty cases treated with Heilserum, two (equivalent) to four per cent.) have died; of fifty treated without Heilserum, nineteen (equivalent to thirty-one per cent.) have been fatal. The author recommends this treatment.

Michael.

Ranke (München).—*Further Experiences with Diphtheria Heilserum.*
 "Münchener Med. Woch.," 1895, No. 8.

OF eighty-five cases of diphtheria treated with Heilserum 18·8 per cent. have died. In most of those microscopically examined Loeffler's bacilli were found. The minimum of mortality during the last eight years was forty-two per cent. In thirty-one cases of laryngeal stenosis the disease disappeared after the injection; in previous years it disappeared only in five per cent. of the cases. In no case treated by Heilserum did there develop any laryngeal stenosis if it had not already existed before the commencement of the treatment. There is also a great difference as regards intubation. In non-injected cases the tube could be removed the first day only in eight per cent.; in injected cases in eighteen per cent.; after two days in forty-two—*i.e.*, twenty-six per cent.; after more than four days, thirty-six—*i.e.*, three per cent. These statistics are more favourable than they have ever been before. Exanthemata and joint diseases are sometimes observed, but not in any proportion to the good effects. The causes of death in injected case, were three from paralysis cordis, ten from descending croup, one from lymphadenitis, and one from sepsis.

Michael.

Sonnenburg (Berlin).—*Further Results of the Effects Behring's Heilserum in Diphtheria.* "Deutsche Med. Woch.," 1894, No. 50.

OF one hundred and seven children treated by serum, eighty-five (equivalent to 79·4 per cent.) have been cured; of these, thirty-four were tracheotomized, with twenty-six (equivalent to 76·5 per cent.) cures. Without serum, there have been treated one hundred and sixteen children, with eighty-four (equivalent to 72·4 per cent.) cures; of these, forty-seven were tracheotomized, with twenty-nine (equivalent to sixty-two per cent.) cures. Of sixteen prophylactically vaccinated children, two have been affected with diphtheria.

Michael.

Behring (Halle-a-S.).—*Rectification.*

Bergmann (Berlin).—*Answer.* "Deutsche Med. Woch.," 1894, No. 50.

POLEMICAL notices concerning Bergmann's paper on diphtheria treatment by Heilserum.

Michael.

Benario (Frankfurt-a-Main).—*The Fabrication of Serum in the "Höchster Farbwerken."* "Deutsche Med. Woch.," 1895, No. 1.

DESCRIPTION of the institutions in the factory.

Michael.

Habel (Troppau).—*Short Communication on a Case of Toxic Effect of Diphtheria Heilserum.* "Deutsche Med. Woch.," 1895, No. 1.

A CHILD, eleven years old, with diphtheria was treated with good effect by Heilserum. Eight days later, swelling of the connective tissue of the head, arms, legs, and neck occurred, with pains in the joints and eruption of an exanthem. No increase of temperature and no albuminuria were observed. Cure resulted some days later. *Michael.*

Seiz (Constanz).—*Serum-therapy in Diphtheria.* "Therap. Monats.," 1894, No. 12.

THE author has treated twenty-seven cases, with one case of death. He concludes that the medicament has a favourable influence on the disease; the effect arises thirty-six hours after the injection; the local process is improved by it; complications are rare; the medicament has no toxic effects; Behring's and Aronsohn's preparations are of equal value. Contrary to most authors, who contend that the treatment should first be applied in the clinics alone, the author demands that every practitioner shall use it, and that judgment as to the value of Heilserum depends on the results obtained by practical physicians. *Michael.*

Hagenbach (Basel).—*Treatment with Diphtheria Serum.* "Correspl. Schweizer Aerzte," 1895, No. 1.

IN his first experiments the author had only favourable results. Now he has observed a case where there was a bad effect. In a child with diphtheria gravis, treated by serum, petechiæ arose over the whole skin and mucous membrane of the mouth and pharynx. The membranes disappeared in a comparatively short time, characteristic of the effect of the serum. Then occurred profuse vomiting and death. The *post-mortem* examination showed petechiæ of the skin and of the endocardium, fatty degeneration of the heart, hæmorrhagic gastro-enteritis, diphtheritic pharyngeal ulcers, and parenchymatous nephritis. The author believes that the petechiæ and the fatal gastro-enteritis were caused by the serum treatment. *Michael.*

Sahli.—*Heilserum Treatment.* Medizin-Pharmaceutischer Bezirksverein in Bern. Meeting, Nov. 13, 1894.

THE author reported upon the results up to now obtained with Heilserum in France and Germany, and recommended the application also in Switzerland. He also recommended the establishment of a branch of the manufactory of Höchst. In the discussion most members agreed with the propositions. *Michael.*

Heller (München).—*Serum Treatment and Pharyngo-therapy.* "Münchener Med. Woch.," 1894, No. 52.

THE author believes that up to now the serum treatment has given no better results than other methods. He recommends local irrigations. (See the report of his first paper in the last number of this Journal.) *Michael.*

Hoynschak.—*Injection of Behring's Heilserum in Diphtheria, and its Consequences.* "Wiener Klin. Woch.," 1895, No. 4.

A CHILD, ten years old, suffering from diphtheria and treated with Heilserum, had urticaria and an affection of the joints similar to polyarthritis rheumatica. Cure resulted. *Michael.*

Ehrlich and Wassermann (Berlin).—*On the Production of Diphtheria Antitoxins of Blood-Serum and Milk of Immunized Animals.* "Zeitsch. für Hygiene," 1894, No. 2.

Ehrlich and Kossel (Berlin). — *On Application of Diphtheria Antitoxins.* "Zeitsch. für Hygiene," 1894, No. 3.

SEE the reports in this Journal on the papers in the "Deutsche Med. Woch.," 1894, No. 20. *Michael.*

Lange (Halle-a-S.).—*Case of Diphtheria with Laryngeal Stenosis cured by Application of Heilserum.* "Deutsche Med. Woch.," 1895, No. 7.

A CHILD with laryngeal stenosis was not tracheotomized, but injected with serum. Next day a great deal of membrane was coughed out, with great relief to the patient. Cure resulted. *Michael.*

Richter (Marienberg). — *Epidemic of Diphtheria; Heilserum Treatment.* "Deutsche Med. Woch.," 1895, No. 7.

OF thirty-one children in Mielenz six have died; of nineteen in Weinersdorf Schönen one only has died. Six of these children were treated with serum and cured. Of sixty-two children prophylactically vaccinated seven contracted diphtheria. *Michael.*

Schwalbe (Berlin).—*Acute Hemorrhagic Nephritis following Diphtheria (without Heilserum Treatment).* "Deutsche Med. Woch.," 1894, No. 51.

DESCRIPTION of a case in which nephritis followed diphtheria. The author proves that inflammation of the kidneys is sometimes combined with diphtheria, and that the Heilserum treatment cannot, therefore, be accused as being the cause of it.

Michael.

Wolf-Lewin (Berlin).—*On a Case of Recurrence of Diphtheria after Treatment with Heilserum.* "Deutsche Med. Woch.," 1894, No. 52.

A PATIENT, ten years old, whose sister was suffering from diphtheria, was vaccinated with Heilserum for immunization. Five weeks later the child contracted diphtheria and was treated with Heilserum. Some days later occurred eruption of an erythema, and ten days later there was recurrence of the diphtheria, with Loeffler's bacilli, and followed by a second erythema. *Michael.*

Kann (Trebsen).—*Contribution to the Treatment of Diphtheria with Heilserum.* "Deutsche Med. Woch.," 1894, No. 52.

OF two cases one has died. The author is satisfied with his results. *Michael.*

Hausermann (Berlin).—*Diphtheria.* "Deutsche Med. Woch.," 1894, No. 52.

Heubner (Berlin).—Answer to the preceding article. "Deutsche Med. Woch.," 1894, No. 52.

POLEMICAL articles.

Michael.

Widerhofer. — *Treatment of Diphtheria by Heilserum.* Königliche Gesellschaft der Aerzte in Wien. Meeting, Dec. 21, 1894. †

OF one hundred cases twenty-four per cent. have died. The mortality during the last year was fifty-two per cent. The author has remarked that a yellowish membrane becomes white one or two days after the injection. Paralyses, nephritides, and erythema have in some cases been observed. The author recommends the treatment, *Michael.*

Bachmann (Salzhemmendorf).—*Two Cases of Heilserum Treatment in Diphtheria.* “*Deutsche Med. Woch.*,” 1894, No. 51.

THE first case was cured. In the second the disease descended to the larynx. Crico-tracheotomy was followed by death. *Michael.*

Behring (Halle-a-S.).—*Remarks on the Answer of Dr. Von Bergmann in No. 50 of the “Deutsche Med. Woch.”* “*Deutsche Med. Woch.*,” 1894, No. 51.

POLEMICAL article. *Michael.*

Rembold (Saulgan).—*Two Cases of Disorders following the Application of Diphtheria Heilserum. Post-Diphtheritic Paralyses of accommodation in spite of favourable influence on the General Health.* “*Deutsche Med. Woch.*,” 1894, No. 51.

(1) A CHILD, seven years old, affected with diphtheria, and treated by Heilserum with good result, presented eight days later a red exanthem on the legs, and pains in the joints. Later on, paresis of accommodation occurred. (2) A patient, eleven years old, with diphtheria, and treated by Heilserum, some days afterwards had scarlatinous exanthema and pains in the joints and muscles. Cure resulted.

Michael.

Pullmann (Offenbach).—*On Serum Treatment.* “*Deutsche Med. Zeitung*,” 1894, No. 99.

THE author has used this treatment in some cases with satisfactory results.

Michael.

Gordon.—*Diphtheria Heilserum in French Hospitals.* “*Deutsche Med. Woch.*,” 1895, No. 3.

REVIEW of the French papers upon this subject.

Michael.

Kossel (Berlin).—*Further Researches on the Results of Behring's Heilserum.* “*Deutsche Med. Woch.*,” 1894, No. 51.

CRITICAL remarks concerning diverse publications and answer to the remarks of Gottstein and Schleich (see the report) concerning the author's statistics, with the conclusion that it cannot be expected that every case of diphtheria will be cured by Heilserum, but it is possible in commencing cases of uncomplicated diphtheria to obtain cure with certainty by the application of a sufficient dose of Heilserum. In later stages of the disease also the results of Heilserum treatment will be better than those of other treatments.

Michael.

Creptner and **Schnabel** (Reichenberg).—*Contribution to the Serum Treatment of Diphtheria.* “*Münchener Med. Woch.*,” 1895, No. 1.

RELATION of one case treated with good results.

Michael.

Eulenberg and **Schwalbe** (Berlin).—*Invitation to aid Collective Investigation of Serum Treatment in Diphtheria.* “*Deutsche Med. Woch.*,” 1895, No. 1.

THE authors hope to elucidate the question by this means, and will send question cards to every German physician.

Michael.

Treyman (Frankfurt-a-M.).—*Case of Hemorrhagic Nephritis following Behring's Heilserum Treatment.* “*Deutsche Med. Woch.*,” 1894, No. 51.

A PATIENT, three years old, with diphtheria of medium gravity, and treated with strong doses of Heilserum, was cured very slowly. Fourteen days later a new membrane arose. New injections of Heilserum were given. The next day high

fever appeared (40°0), and the eruption of an exanthem similar to measles. Very much albumen appeared with cedema, and the following day anuria. Later on cure followed, but some time afterwards paralysis of the soft palate and anæmia were observed. *Michael.*

Goebel (Hamburg). — *Diphtheria Recurrences in Treatment with Behring's Heilserum.* "Deutsche Med. Woch.," 1895, No. 2.

Up to the present three cases of recurrence of diphtheria following treatment with Heilserum have been described. The author adds two new cases. (1) A patient, two years of age, suffering from laryngeal diphtheria. Injection of one thousand five hundred immunity units of Behring's serum; tracheotomy. Improvement during the next few days. Twelve days later, removal of the canula. Four weeks later, recurrence of diphtheria of the pharynx and larynx. New treatment with Heilserum. Cure. From both attacks virulent cultures could be made. (2) A child, seven years old, with diphtheria was treated with one thousand immunity units of Behring's Heilserum. Next day tracheotomy became necessary. Five days later the canula could be removed. Thirty days later a second diphtheria treatment became necessary with Heilserum. Cure resulted. *Michael.*

Cugrun (Frankfurt-a-M.). — *Two Cases of Toxic Effects of Heilserum.* "Deutsche Med. Woch.," 1894, No. 48.

THE author's assistant, Dr. Gallus, was attacked with membranous diphtheria, proved by bacteriological examination. Injection of Heilserum No. 2 was made; temperature 39° C. Two days later the symptoms had disappeared. Five days later an urticaria arose over the place of injection, combined with swollen lymphoid glands, rheumatoid pains, and fever. Convalescence was slow. The patient will be unable to work for a long time. The same day the other assistant, Dr. Korte, presented an angina. Believing the cause to be the same as in the previous case, the same injection of Heilserum was made. The angina and its symptoms disappeared next day. Five days later the same symptoms as in the other case (urticaria, rheumatoid and nervous pains, enlarged glands, fever, and adynamia) arose. There were also paræsthesia and pains in both hands. Loss of weight amounted to two and a half kilogrammes. Convalescence slow, and difficulty in the use of the arms for a long time. The preparation was of Höchst, and injections were made with strict antiseptic precautions. *Michael.*

Abel (Greifswald). — *Immunizing Power of Blood-Serum of Diphtheria Convalescents and Healthy Individuals against Lethal Doses of Diphtheria Bacillus Cultures and Diphtheria Bacillary Poison in Guinea-Pigs.* "Deutsche Med. Woch.," Nos. 48 and 50.

THE author concludes that the blood-serum of many healthy persons, between the twentieth and fortieth years of their age, and who have never had diphtheria, has the power to immunize guinea-pigs against diphtheria. The blood-serum of diphtheria convalescents has no immunizing power during the first days of the disease (before disappearance of the membranes). Between the eighth and the eleventh days the immunizing power is nearly always found. Some months after the cure of the disease the immunizing power disappears in most persons. This difference between the different instances is not yet explained. *Michael.*

Heckel (Triesdorf). — *Peptonuria following Serum Treatment in Diphtheria.* "Münchener Med. Woch.," 1895, No. 8.

THE author has used the Heilserum treatment in six cases. In only one of them was the application prophylactic. Of the five cases of diphtheria one has died. In

all cases the author found peptone in the urine. He believes that this is an excretion of fibrinous masses which are contained in the serum. *Michael.*

Felsenthal.—*On Diphtheritic Paralyses.* “*Kinderarzt*,” 1895, No. 2.

REVIEW.

Michael.

Neudorfer (Wien).—*Behring's Heilserum and Peroxide of Hydrogen.* “*Wiener Med. Woch.*,” 1895, Nos. 2 and 6.

THE author has found that peroxide of hydrogen can cure diphtheria in most cases. He does not believe that it is a specific medicament, but it owes its effect to destruction of the bacilli, and by producing the excretion of the toxic matters by the kidneys. He believes that by using blood-serum mixed with peroxide of hydrogen the same results can be obtained as by Heilserum alone. *Michael.*

Pavlik (Waag-Neustadt). *On Heilserum.* “*Wiener Med. Presse*,” 1895, No. 5.

OF seven children who had been prophylactically inoculated three have been affected with diphtheria during the next twelve to thirty days. In seven cases of diphtheria treated by Heilserum he has obtained cures. *Michael.*

Kuh, E. J.—*Some Additional Experience with Behring's Antitoxin, and Remarks on Loeffler's Toluol Solution.* “*Med. News*,” Jan. 26, 1895.

A PREVIOUSLY published unsuccessful case is first reproduced, followed by a detailed description of five cases all cured; four were treated with antitoxin and local application of toluol, and one with toluol only. The author draws attention to the greyish tenacious deposits caused by toluol. To toluol also he ascribes the power of aborting follicular tonsillitis, and praises it in pseudo-diphtheria of scarlet fever. *R. Lake.*

Williams, F. H.—*A few Cases of Diphtheria treated with Antitoxin.* “*Boston Med. and Surg. Journ.*,” Dec. 20, 1894.

SELECTED cases from about twenty. One case is of interest, as the bacilli were found on the tenth day, nine days after a fifteen cubic centimetre injection of Behring's No. 3 solution, and in another they were found six days after injection by Aronsohn's; in these cases no local treatment was adopted. When the bacilli disappeared quickly, local treatment by hydrogen peroxide had been used. *R. Lake.*

Colla (Wriezen).—*Case of Serum Exanthem.* “*Deutsche Med. Woch.*,” 1895, No. 3.

A LADY, twenty-two years old, was treated by Heilserum with good result. Five days after the first injection an exanthem arose, similar to scarlet fever, combined with pains in all the joints, but without any rise of temperature. The exanthem disappeared eight days later. *Michael.*

Bachmann (Salzhemmendorf). — *Treatment of Diphtheria with Heilserum.* (Second communication.) “*Deutsche Med. Woch.*,” 1895, No. 3.

THE author has since his first publication treated four other cases of diphtheria with good result. *Michael.*

Widerhofer (Wien). — *On One Hundred Cases of Diphtheria treated with Heilserum.* “*Deutsche Med. Woch.*,” 1895, No. 2.

SEE the report on the meeting of the Gesellschaft der Aerzte in Wien, December 21st, 1894. *Michael.*

Schmidt (Erdmannsdorf).—*Contribution to the Therapeutic and Prophylactic Value of Behring's Antitoxin.* "Deutsche Med. Woch.," 1894, No. 52.

OF forty-one cases treated in eight weeks four have died; of twenty-seven cases without treatment with Heilserum one has died; of fourteen injected cases three have died. Twelve children prophylactically vaccinated did not contract diphtheria. The author is satisfied with his results. *Michael.*

Klipstein (Mainz).—*Disorders following the Application of Heilserum.* "Deutsche Med. Woch.," 1894, No. 52.

A CHILD, three years old, affected with diphtheria was treated by Heilserum. Twelve hours later, increase of fever, urticaria, exanthem and pains in the joints; next day, bronchitis. Cure after several days. The author does not doubt that the symptoms were caused by Heilserum. *Michael.*

Ferran (Barcelona).—*Priority of Diphtheria Immunization in Animals.* "Deutsche Med. Woch.," 1894, No. 52.

THE author has sent to A. Fraenkel a paper printed in 1890, containing the result of experiments on immunization. A. Fraenkel concedes the priority. Babes (Buda-Pest) published in 1889 and 1890 the opinion that the blood of immunized animals can produce immunity in other animals. *Michael.*

Kersch (Wien).—*Croup and Diphtheria Treatment without Local Pharyngeal Treatment.* "Wiener Klin. Woch.," 1894, No. 51.

RECOMMENDATION of iodide of potassium and salicylic acid. *Michael.*

Joire—*New Treatment of Whooping-Cough.* "Bull. Méd. du Nord," XXXIV., 4, Feb., 1895.]

THE author has successfully treated many cases of whooping-cough by wrapping the young patient every day for one hour in a sheet soaked in a decoction of flowers of rye-grass, and administering evening and morning six or ten drops of fennel oil on sugar. *A Cartaz.*

Sonnenberger (Worms).—*Some Remarks on the Paper of Dr. Rehn in No. 46 of the "Münchener Med. Woch." Prussiate of Antipyrin in Whooping-Cough.* "Münchener Med. Woch.," 1894, No. 52.

THE results of prussiate of antipyrin do not differ in anywise from those obtained by use of pure antipyrin. *Michael.*

Hulke, J. Whittaker (London).—*Five Cases of Cancer treated with Cinnamon.* "Lancet," Sept. 15, 1894.

THE glowing accounts recently published of beneficial results in otherwise hopeless cases of cancer from the daily consumption of half a pint of a decoction of cinnamon (made by boiling a pound of sticks of Ceylon cinnamon in three pints of water till reduced to one pint) by Dr. Carne Ross occasioned the trying of the remedy in five cases of various forms of cancer under Mr. Hulke's care at the Middlesex Hospital. The results were wholly negative, and morphia, which was interrupted, had to be resumed. The cinnamon became intolerable to the patients. [It would be interesting to observe whether the effect was equally unsatisfactory in patients who had not yet tasted morphia.—REP.] *Dundas Grant.*