7. Glandular swelling is common, but is not invariably present.

8. In order to avoid error in diagnosis all cases of acute sore throat should be examined bacteriologically.

9. It is necessary to found in all hospitals a special department for anginas, which would be most useful and assist to limit the spread of the contagion.

HICGUET maintained that the virulence of the angina should be attributed to the association of microbes, especially the staphylococcus and streptococcus. Dr. Gouguenheim did not deny this, but the bacillus of Loeffler is not less the true cause of infection, for pure diphtheria is frequently observed—forty-five times in ninety-three; in forty-one cases there was mixed infection, and in seven the streptococcus was alone present. The gravity of the case depended upon the laryngeal trouble caused by pure diphtheria, without the presence of the mixed infection influencing the marvellous action of the serum. Finally, one meets with Loeffler bacillus in convalescents and in those considered slightly affected. And one has seen diphtheria regarded as cured pass on the infection.

(To be continued.)

ABSTRACTS.

DIPHTHERIA, &c.

Crouch, H. C.—*The Detection of the Diphtheria Bacillus.* "New York Med. Journ.," Oct. 5, 1895.

THIS is effected by the use of certain stains—namely, a one per cent. of methyl-green; a mixture of five parts of a fresh one per cent. solution of methyl-green, one part of a one per cent. solution of dahlia-violet, and four parts of water, and then with a weak solution of Bismarck brown. Other stains will give the same results, but this is the best. They all react best in recent cultures. *R. Lake.*

McCollom, J. H.—*The Importance of Bacteriological Investigations in Cases of Diphtheria.* "Boston Med. and Surg. Journ.," Jan., 1895.

OUT of five hundred cases of suspected diseases 26·6 per cent. proved to be diphtheria, and the author, after describing several, and quoting various authorities, says:—In suspected cases of sore throat or cases of profuse nasal discharge the investigation should be made. No patient to be removed from isolation without inoculation having twice been negative. The pseudo-bacillus is sufficiently rare to be ignored. *R. Lake.*

Fossaty.—*Anomalous (Frustes) Forms of Diphtheritic Angina.* Thèse de Paris, 1895.

SUMMARY description of diphtheritic angina, without pseudo-membranes. Nothing new, except two unpublished cases. *A. Cartaz.*

Ewing, J.—*The Leucocytosis of Diphtheria under the Influence of Serum Therapy.* "New York Med. Journ.," Aug. 10 and 17, 1895.

THE author examined the blood of fifty-three patients who underwent the serum treatment, and after an elaborate paper, which it is not possible to condense so as to do justice to the author, the following summary is given.

Diphtheria is usually attended with marked leucocytosis. The increase of leucocytes usually begins a few hours after infection, probably occurring earlier in refractory individuals, and, often being long delayed in susceptible cases with severe inflammation. In favourable cases the leucocytosis is the greatest at the climax of the disease, and steadily declines during convalescence. There may, however, be prolonged hyper-leucocytosis after other local and constitutional symptoms have subsided. In unfavourable cases the leucocytosis continues until death, but in somewhat prolonged cases, with much septic absorption, there may be an uninterrupted decrease of leucocytes continuing up to the fatal termination. A complicating pneumonia usually causes a considerable increase in leucocytosis.

The degree of leucocytosis in diphtheria often varies with the fever, but much more frequently corresponds to the extent of the local lesion.

The intra-vascular leucocytosis of diphtheria indicates a pronounced reaction against a severe infection, but is not necessarily an unfavourable prognostic sign. Steadily decreasing leucocytosis usually, but not always, accompanies a favourable course in the disease. Slight leucocytosis usually indicates a mild infection, but fatal cases may for several days show no increase, or even a decrease, of leucocytes.

The staining reaction of the leucocytes is an accurate measure of the severity of the diphtheritic infection, and variations in this reaction often precede changes in other symptoms.

Antitoxin, within thirty minutes of its injection, causes a hyper-leucocytosis, the reduction affecting specially the uninuclear leucocytes, while the proportion of well-stained multinuclear cells is increased. This action is due largely to the immunizing principle contained in the serum.

In favourable cases, after the injection of antitoxin, the leucocytosis never again reaches its original height. In severe and less favourable cases the injection is followed in a few hours by hyper-leucocytosis and fever, exceeding those symptoms as found in the original condition. In unfavourable cases an injection of antitoxin may be followed immediately by rapid hyper-leucocytosis, or extreme hyper-leucocytosis and death.

The reduction of leucocytes immediately succeeding the injection of antitoxin, especially in severe cases of diphtheria, is an undesirable feature of the action of this agent, and as far as possible should be avoided.

The multinuclear leucocytes found in the blood of favourable cases after treatment by antitoxin show increased affinity for gentian violet. This change may be observed within twelve hours after the injection, and the failure of its occurrence is a very unfavourable prognostic sign.

The variations in the staining reaction of leucocytes in diphtheria indicate that the nuclei of these cells contain a principle esssential to phagocytosis and immunity in this disease. *R. Lake.*

Patet.—*Serum Treatment; Clinical Results.* Thèse de Lyon, 1895.

CRITICAL review of this method of treatment, and *exposé* of the statistical results in general. The author describes the technique, and enumerates the clinical indications and accidents of serum treatment. He attributes to the serum only exanthemata. In the Charity Hospital of Lyons the percentage of the mortality has fallen to seventeen per cent., instead of forty to fifty per cent. before the introduction of antitoxic serum. *A. Cartaz.*

Mugues.—*Laryngeal Intubation in Diphtheria; Critical and Clinical Study.* Thèse de Lyon, 1895.

DESCRIPTION of the method (technical application, indications and complications). The author gives general statistics of the cases treated in Lyons since 1890:—

Before the serum treatment, one hundred and twenty-four cases; dead, eighty-three cases.

Secondary tracheotomy has been necessary twenty-five times, with twenty deaths.

After the serum treatment, seventy-three cases; dead, twenty cases.

A. Cartaz.

Baudouin, T.—*Intubation in Croup.* Thèse de Paris, 1895.

A COMPLETE description of the method. The original statistics of the author include seventeen cases treated in Rennes's Hospital. Twelve treated by intubation, with eight deaths; five treated by intubation and antitoxin, with two deaths. *A. Cartaz.*

Tsakiris, J. — *Ancient and Modern Instruments for Intubation in Croup.* Thèse de Paris, 1895.

DESCRIPTION of the various instruments and modifications of O'Dwyer's first model. He uses an extractor with metallic loop and tubes of aluminium.

A. Cartaz.

Castelain.—*Chloroform and Tracheotomy.* "Bull. Méd. du Nord," Aug. 23, 1895.

THE author is in favour of anæsthesia in cases where tracheotomy is necessary, and also in cases of diphtheria. He gives rules for administration of anæsthetics and the indications for anæsthesia. *A. Cartaz.*

NOSE, &c.

Pascal, A.—*Parasites of the Nasal Fossæ.* "Archiv. de Méd. Milit.," Oct., 1895.

DESCRIPTION of a case of entrance into the nasal passages of *Lucilia hominivorax* larvæ. Intense pains, with purulent and sanious discharge, and destruction of the septum. The cavities were cleaned partly by free sublimate washing, tobacco, and pulverizations of sublimate and iodoform, and partly by direct extraction with forceps. The larvæ amounted to upwards of eighty. Complete cure. *A. Cartaz.*

Winslow, J. R.—*A Case of Congenital Osseous Occlusion of the Choanæ.* "American Med. and Surg. Bull.," Feb. 15, 1895.

THE bony occlusion of the choanæ was destroyed by galvano-cautery, curing deafness which had been present for some time. *R. Lake.*

Adenot.—*Nasal Osteoma. with Epileptic Seizures.* "Lyon Méd.," April 18, 1895.

THE author relates the case of a young man, aged twenty-seven, suffering for five years with frequent nocturnal epileptic seizures. No syphilis; no alcoholism; no results with bromide of potassium in large doses. He found in the right nasal fossa a large tumour, osseous, and completely obstructing the nostril. The tumour was sessile and fixed. Ablation after anæsthesia by vertical osteotomy of the nose (Ollier's method). During a month there was abolition of the epileptiform crisis, which reappeared, but not so frequently, and not so intense. The tumour was an osteogenic exostosis, with chondromatous envelope. *A. Cartaz.*