The presence of micrococci in the membrane;
The cultivation of the micrococci in pure cultures to the tenth generation;

The inoculation of guinea pigs with micrococci of the sixth cultivated generation, and reproduction of the disease;

The unwitting inoculation of the experimenter, thus bringing the disease back to its original form in a human being.

PHTHISIS PNEUMONICA ET LARYNGITIS CHRONICA.

*Read before the Medical Society of the District of Columbia,
December 12, 1888.*

BY A. A. HOEHLING,
MEDICAL INSPECTOR, U. S. NAVY.

C. H., Corporal U. S. Marine Corps, native of Wilmington, Del., age, 41 yrs. 8 mos., enlisted at Annapolis, Md., August 14, 1887. Admitted from U. S. Naval Academy, Annapolis, Md., at 2:30 P.M., September 19, 1888. Died November 21, 1888.

"The patient has had sixteen years' service in the U. S. Marine Corps. Dates the beginning of his ill-health in September, 1887, when he 'caught cold' sleeping on deck on board the U. S. S. 'Dolphin' on a passage from Annapolis to Philadelphia. He has been from time to time under treatment at this station, but has continued on duty until two days ago. He has in the last twelve months had fever from time to time, night sweats, cough and progressive emaciation, with loss of appetite. He has percussion dulness at tops of both lungs, irregular expiratory blow and subcrepitant râles, most abundant on right side in front. He has had occasional hoarseness for six or eight months. This has grown rapidly worse in last ten days, with irritation of larynx, hoarseness of voice almost to extinction, and much difficulty and pain in deglutition. Epiglottis is thickened and distorted, and left aryteno-epiglottidean fold swollen, and encroaching upon cavity of larynx to such an extent as to obstruct view of vocal cords. Patient has had cod-liver oil since September 1. Last two days spraying of larynx once a day with sol. nitr. silver, gr. v to ʒj, also three times a day with a 2 per cent. sol. cocaine before eating."

At present he has the characteristic appearance of a consumptive, is considerably emaciated, cannot speak above a whisper, and swallows liquids with much difficulty; He has bronchial breathing at the apex of both lungs, and below this, especially on right side, subcrepitant râles take the place of the normal vesicular murmur. Laryngoscopic examination reveals an cedematous and congested state of aryteno-epiglottidean folds and the epiglottis much thickened, interfering with deglutition. Ordered diet of milk, eggs, rare beef and corn-starch. To have ol. morrhuae and

whisky, and to use steam atomizer with wine of ipecac.

September 23. Morning temperature has been normal and evening temperature has been about 101° daily. Expectoration profuse. Cough harassing, and breathing labored on account of condition of throat; deglutition somewhat improved. Treatment continued, to use also ammon. hydrochlor. sol. in atomizer.

September 27. Condition slightly improved. Continue treatment.

October 3. Patient states he has gained 8 lbs. since admission to hospital. Laryngeal symptoms remain unchanged; less expectoration. Temperature range A.M. normal, P.M. about 100.4°. Is taking ol. morrhuae and beer. Is using a spray of tr. ferr. chlor., alternating with a spray of vin. ipecac.

October 10. Condition continues about the same. Throat sprayed twice daily with Dobell's solution and sol. cocaine, followed by application of equal parts of tr. iron and glycerine. Deglutition seems improved. Continue treatment.

October 20. Evening rise of temperature less, about 99.6°. General treatment continued. Is losing in weight and strength.

October 27. Patient is gradually failing. No ulcers apparent in throat yet. Continue general treatment.

November 6. Patient very weak. Expectoration profuse, cough harassing, deglutition much impaired, but the patient is very hopeful. Ulceration of the cords apparent, though a good view cannot be had. Continue treatment.

November 12. Patient is failing slowly, is now confined to bed. There is apparently a large cavity in right lung and left lung seems much involved; cough harassing, expectoration profuse. Supported by milk-punches. Swallows with difficulty. Treatment continued.

November 16. Scarcely able to swallow anything; very weak, failing slowly.

November 17. Very weak. Refuses to take nourishment by mouth. Ordered enemata of beef-tea and whisky every three hours.

November 19. Very weak; supported by enemata of egg-nogg, beef-tea, milk, etc.

November 20. No change.

November 21. Died at 2:25 P.M.

Necropsy twenty hours after death. Body greatly emaciated; rigor mortis passing off. Upon opening the thorax the pleura was found firmly adherent to the chest wall and diaphragm (entirely obliterating the pleural cavity), requiring considerable force for its detachment.

Pericardium contained about 60 cc. of clear serous fluid.

Heart normal. The cavities contained each a small amount of dark blood clots, and large fibrinous clots extended from them several inches into the large vascular trunks.

Lungs were studded with miliary tubercle, increasing in quantity from apex to base; on section the tissue seemed exsanguine, of a grayish color, dotted with the black tubercle and filled with numerous cavities, varying in size from a pin to a small orange, containing offensive pus, with the exception of a small portion at base of each lung which was highly congested, with tubercle throughout its substance. All the smaller bronchial branches were obliterated by the tubercular deposit in the surrounding portion of the tissue. Fibrinous bands were found between the lobes and the larger cavities were lined by a similar membrane.

Larynx.—The upper part of posterior portion of the thyroid, the arytenoid, the epiglottis, and the ligaments and attachments corresponding to these, with the vocal cords, were destroyed by ulceration.

Abdominal viscera not examined, and cranium not opened, as it was deemed unnecessary.

NOTES ON TWENTY-SEVEN CASES OF DIPHTHERIA,

OCCURRING BETWEEN JULY 1, 1888, AND JANUARY 1, 1889.

*Read before the Section for Clinical Medicine, Pathology and Hygiene,
of the Suffolk District Medical Society, January 19, 1889.*

BY HENRY JACKSON, M.D.,
OF BOSTON.

From July 1, 1888, to January 1, 1889, I treated twenty-seven cases of diphtheria out of 1,031 cases of all kinds, seen in the second district of the Boston Dispensary, situated on the West side of Hanover street. Of these cases, five died; four of septicæmia, one of laryngeal obstruction.

Five cases were very mild; two were not confined to the bed.

In most of the cases the membrane was confined to the uvula and pillars of the pharynx. In these cases a large part of the roof of the mouth and lips was covered with membrane. Fifteen cases occurred in houses where the sanitary condition was bad. Ten case where the sanitary condition was apparently good. Two cases in a house that seems to be in good condition, and yet one where I have found much sickness in the last two years, notably diphtheria last winter.

Where there were several children in a family, usually one or more cases of diphtheria appeared shortly after the first cases, Namely:

In a family of three children all had the disease.

In a family of five children four had the disease.

In a family of three children two had the disease; later in the year two members of this family had typhoid fever. In all cases the disease was strictly confined to the house where it first appeared, and in only one instance did the disease

spread to other families living in the same tenement.

Of the twenty-seven cases four were young adults; the average age of the children was 5 years, the youngest being 18 months.

As of importance in making an early differential diagnosis between diphtheria and follicular tonsillitis, I have found that in diphtheria:

1. The temperature was much lower, often normal.

2. The constitutional symptoms were usually less severe at first.

3. The glands about the neck were more swollen and tender.

In all cases I have felt justified in making a diagnosis of diphtheria where there was membrane on the uvula or on the pillars of the pharynx.

As last year I could report that, having had in my charge in this district a large epidemic of scarlet fever, I was not aware of having carried the disease to a single child, so this year not a case of diphtheria has occurred in a family that was under my care for other diseases.

In other words, so far as an opinion can be formulated from so small a number of cases, the disease is very infectious to young children brought in immediate contact with those sick; the disease does not spread from house to house; the disease is not easily carried by a third person.

The following list shows the character and distribution of the various infectious diseases in the portion of the city above described, during like periods of two successive years.

JULY, 1887, TO JANUARY, 1888.

Diphtheria	8
Tonsillitis	57
Scarlet fever	68
Measles	5
Typhoid	24

JULY, 1888, TO JANUARY, 1889.

Diphtheria	27
Tonsillitis	33
Measles	5
Scarlet fever	1
Typhoid	23

MEDICAL PROGRESS.

NERVE-GRAFTING.—At the meeting of the Clinical Society of London, on January 25, Mr. MAYO ROBSON showed a girl, æt. 14, on whom he had successfully grafted two inches and a half of the posterior tibial nerve into a corresponding gap in the median nerve in the forearm. He also showed the tumor which had involved the median nerve, and had necessitated its removal. The history of the case, briefly, was that the patient had noticed the tumor growing for six years, but that it had grown more rapidly during the past twelve months, during which time it had