

of thorax. Has some expectoration, but in four specimens found no bacilli.

6th.—At left base of uvula a patch appeared, showing a whitish membranous covering, which was thrown off in two days, leaving an ulcer which was healed by Dec. 5th.

8th.—0.003 c. c. injected, and no rise of temp., but resp. 64. Pain in larynx; upper surface of right arytenoid body swollen more than left, but no change in color, or ulceration. Tendency to cough; no sputum. Slight constitutional disturbance.

10th.—0.003 c. c. injected. Temp. normal; resp. normal. Night sweats absent; feeling of a cold in nose. Pains renewed in right base.

12th.—0.005 c. c. injected. No reaction, and temp. pulse and resp. normal. Limbs weak.

Weight.—Before treatment, 105 lbs.; after first, second and third injections, 97 lbs.; during last ten days, with small reactions, 99 lbs. No albumen in urine; spleen always normal.

Dec. 15th.—0.005 c. c. injected. No reaction.

17th.—0.007 c. c. injected. No reaction.

REMARKS.—This patient has every indication of a permanent cure being effected.

1890. CASE II.—Painter, æt. 24. Mother died of pneumonia, tubercular; father died of consumption; one brother alive and healthy. As a child, had typhoid fever, measles, scarlet fever; never had scrofulous glands. Present trouble commenced in Sept. of this year, with cough and expectoration. At end of Sept., hæmoptysis (a cupful); end of Sept., for fourteen days, complains of night sweats, chills in evening, and fever. Present complaints are cough and pain in chest on deep inspiration. Strongly built, good muscular system, face flushed, skin brownish, and slight indication of lead line. Pulse regular, 72; appetite and thirst normal; tongue coated, liver normal size, thorax well built.

Supra and infra clavicular fossæ of left side give, on percussion, a shorter and higher note than on right side. This is also the case in supra and infra spinous fossæ on left side. Behind from body of seventh vertebra on left side, percussion note is shorter than on right side.

On auscultation, left anterior apex, bronchial respiration. Below clavicle, anteriorly on left side, soft bronchial breathing, with numerous small sized râles at height of inspiration. Behind, on left side, evident pleuritic friction, particularly

from seventh vertebra downwards. Breathing at this point is weaker than on right side. Heart normal. Vital capacity 2000 c. c. Tubercular bacilli in large numbers.

Nov. 6th.—Small ulceration on left arytenoid body, inner side.

10th.—Percussion note, left apex, shorter. Left supra spinous fossa, bronchial breathing and râles. In left supra and infra clavicular fossæ, soft bronchial inspiratory breathing, and not very numerous râles. Post. left lower lobe still shows shorter percussion note and weaker vesicular breathing than right side. During all the time observed (Oct. 13 to Nov. 18) had night sweats only twice.

18th, 8 a.m.—Injected 0.002 c. c. 6 p.m., temp. 38.6°; 7 p.m., temp. 39.3°; 8.30 p.m., temp. 39.5°; 10 p.m., 38°. During reaction, face flushed and complains of feverishness, pain in left leg. Has slight exanthemata in face, itching, sweats severely. Pulse dicrotic, conjunctivæ reddish; complains of pain in left chest.

19th, 7 a.m.—Temp. 37.5°. Feels well.

20th, 9 a.m.—Temp. 36.4. 0.003 c. c. injected. Vital capacity 1800 c. c. Shows no particular reaction, except face, which in evening shows reddish spots. Sputum is increased 4 c. c. At inner side of left arytenoid body, have discoloration of mucous membrane.

22nd.—0.005 injected. Sputum is increased to 60 c. c. Bacilli found without morphological change. No temperature reaction.

23rd.—No fever; complains of pain in neck, oppression of chest. On anterior commissure, mucous membrane shows some whitish prominent patches. No distinct swelling surrounding it.

24th—0.008 injected. Temp. 38.5°. 4 p.m.—Complains of pain in neck, and this time ulceration of right arytenoid body is noticed. Both vocal cords injected. Epiglottis pale.

25th.—Temp. normal. Redness of larynx decreased. Sputum increased to 60 c. c.

26th.—0.001 injected. Temp. normal. The nummulated sputum appears mucous and is decreasing 30 c. c. Vital capacity 1700 c. c.

27th.—Exanthemata of face, very apparent. Evident ulceration of right arytenoid body and ulceration of vocal cords. Sputum 10 c. c.

28th.—0.005 c. c. injected; slight reaction. Complains of pain in back and shoulders. In six preparations, one bacillus found.