man of truth and honor, who has practiced midwifery for half a century, should convince every right-minded man, that there is no need that country physicians should take the precautions against germs, so strongly urged by the advocates of listerism. But Dr. Green is sustained by other good men whom I have named and thousands of others whom I could name. No, I need say no more, for if one were to rise from the dead and give like testimony, the antiseptic enthusiasts and laboratory practitioners would still discredit the testimony of the bed-side practitioner.

SOME CLINICAL EXPERIENCES WITH EUCALYPTOL.

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During the last ten years I have often prescribed eucalyptol in bronchial and pulmonary troubles. From this experience I have learned to put a high therapeutic value upon it in some respiratory affections, viz.: chronic bronchitis, persistent cough, chronic interstitial pneumonia, and to a less degree in tuberculosis.

The following list of cases taken from my later experience, furnishes a reasonable amount of proof of its utility:

Case 1.—Miss Bellard, aged 19. This lady called upon me in August, 1888. She complained of malaise, and some pain in the left lung. She had only a moderate cough and a limited expectoration. The temperature was 99°. Auscultation revealed a harsh and catchy respiration in the upper lobe of the left lung. A trifling dulness on percussion could be discovered in this region. I gave the girl eucalyptol, and had her visit my office every fortnight for half a year. She so far improved as to lend expectation of her recovery. Then, school beginning, she started to school. As cold weather came on, she was chilled one day in school, and developed a severe croupous pneumonia. For this she was treated by a physician in her town, but not recovering, I was called to see her. Resolution did not take place as it should, and I advised the mother that the girl would never recover from this sickness. After a few weeks she died. I believe that except for this intercurrent pneumonia, this girl would have continued to progress to a recovery from the phthisis. For a whole year she improved until she felt nearly as well and strong as ever. Then she sickened with pneumonia and died in two months.

Case 2.—Mrs. Thompson, aged 30. This lady called upon me in September, 1889. She was emaciated to a skeleton, had hectic fever, pulse about 90, cough with some expectoration, and tenderness on percussion over both lungs. The respiration was catchy and frequent. She had almost a loathing for food and scarcely strength enough to come to my office. She had been ill for many months. I put her upon eucalyptol and cod-liver oil. She rapidly improved in all respects, and ceased to visit me after about two months. I had her under observation until all the objective symptoms, including the catchy respiration, ceased. I see her occasionally. She says my prescription has made a new creature of her. She is in her usual flesh and is doing her own work.

Case 3.—Mrs. Morton, aged 26, called upon me in September, 1889. She had a miscarriage in the spring. Upon rising from this sickness she took cold and developed a cough and soreness through the lung, from which she did not recover all summer. Neither did her menses reappear. She is from a consumptive family. These things alarmed her somewhat, and she applied to me for aid. Her respirations were harsh and catchy, and her cough was quite troublesome. I gave her a prescription containing eucalyptol, and have had her under observation ever since. Her respiratory murmur is all right and she has menstruated once or twice since, and now seems to have gone into her menopause at this early age. She is in perfect health.

Case 4.—Mr. Bradford, aged 30, called upon me in December, 1889. He complained of a pain in his chest and an inability to take deep inspirations with ease. Work involving the use of the pectoral muscles, as chopping, sawing, husking corn, etc., was painful. He was growing poor and emaciating. Physical examination of the chest revealed a little dulness on percussion over the upper parts of both lungs, and a harsh catchy respiration. I put this man upon eucalyptol, and watched the case for a year and more. The patient still complains at times of lameness in the thoracic parietes, but he now has less of the catchy respiration and none of the dulness on percussion.

Case 5.—Miss McLaren, aged 16. In February, 1890, I was called to see this girl. I found her in bed. She had a temperature of 102°, a pulse of 120, respiration 30, cough and expectoration. She had la grippe a few months before and had fallen into this state. Her respirations were harsh, tubular and catchy. I treated her symptomatically and put her upon cod-liver oil at once. After about a month she began to walk out, and then I gave her eucalyptol besides her cod-liver oil. She continued to improve for some months, when I permitted her to go from my care to Ohio, where she has since remained. When I first saw her, she was much emaciated, but now she weighs 150 pounds. The cough and expectoration have ceased, and she is now perfectly well. Several children in this family have already died of consumption, and I believe this girl had incipient phthisis. The only thing lacking in the evidence is the demonstrated presence of the tubercle bacilli. I made no search for them.

Case 6.—Mrs. Pulfrey, aged 34, visited me in February, 1890. She had been failing for some months. She complained of pain in her right lung. The percussion note was normal, but the respiratory murmur was catchy. I put her upon eucalyptol and Phillip's wheat phosphates. She soon began to revive in every way. The catchy respirations have ceased and the patient has nothing to remind her of her former condition except her feeble endurance.

Case 7.—Mr. Young, aged 27. In the latter part of 1889 this man was taken sick in Boston. He was treated for bronchitis, but finally had to go into a hospital. Here he heard the visiting physician, a college professor, say to a class of medical students: "We don't get hold of this case." After a few weeks' stay in the hospital he came to Michigan to accept the hospitalities of his brother. In February, 1890, I was called in to see him. I found him greatly emaciated, with a temperature of 101°, pulse about 90, respiration 28, and a violent cough, raising about a pint a day of frothy, bloody sputa, containing mucous, pus and blood. The sputa had a rank, gangrenous odor, and separated into two layers, one of fluid and one of foam. This was enough to make a diagnosis of gangrene of the lung. Physical exploration revealed a small area of flatness at the lower point of the right lung. The rest of the lung was a little super-resonant because of its doing compensatory work. On several occasions this patient had alarming hæmorrhages. I put him upon eucalyptol and cod-liver oil. He gradually improved under this treatment, and went to Canada to live upon his

father's hospitality. Improvement continued, and now, after one year, he says he is as well as ever.

Case 8.—Mr. Brown, aged about 60, consulted me in April, 1890. He is asthmatic, had the grippe a few months before and was left with a very aggravating cough. He had consulted three or four other physicians without benefit before he came to me. I prescribed an emulsion of eucalyptol and hyoscinum, and was gratified to hear from his own lips the next morning that he had spent the best night for several months. The cough ceased at once.

Case 9.—Mr. Adams, aged about 40. This patient first came into my hands in July, 1890. He was emaciated, had a consumptive look, complained of pain in both lungs, and coughed some in the morning. He had just buried a brother from consumption. His respirations were jerky and the area of hepatic flatness was enlarged. His greatest complaining was about a circumscribed point of tenderness in the greater curve of the stomach. This I believed to be a tubercular ulcer. I put this man upon eucalyptol and bismuth mixtures, in separate bottles, and kept him under observation for a few months; but as he would not believe there was anything wrong with his lungs, and as his stomach was not bettered, he desisted from the treatment. It is to be said, however, that the respirations nearly ceased to be jerky during the latter part of the time that he remained under treatment.

Case 10.—Mr. Hayt, aged 27, applied to me in January, 1891. He had had influenza and had been left in a condition of prostration, and with pain in both lungs. I found the respirations catchy and both lungs dull, especially in their lower portions. Strange to say the temperature was normal, the pulse 64, and the respiration 16. Four years before an eminent physician told him that something was wrong with his lungs. He had been obliged to quit work, and since had done but little work. He is about five feet and eleven inches tall and weighs only 135 pounds. He has a consumptive look. I put this man upon eucalyptol and cod-liver oil. Almost full resonance has been restored to the lungs and the respirations are but slightly interrupted. There never was any expectoration. My diagnosis in this case was chronic interstitial pneumonia.

Case 11.—Miss Taylor, aged 29. I was called to see this patient in January, 1891. She had had pneumonia in Grand Rapids, Michigan, and had come to her sister's a week earlier than her physician had told her she might. She took cold upon the train. This prevented resolution. I found her with a temperature of 101° and respirations 24. The lower lobe of the left lung was flat upon percussion, and the breathing was tubular. This was some two months after the onset of her pneumonia. The expectoration was muco-purulent and abundant. I prescribed eucalyptol and cod-liver oil for her. She has steadily improved and her prospects for an ultimate recovery are fairly good.

Case 12.—Miss Reid, aged 21. On the second day of March, 1891, I was called off from the road to see this girl. About Christmas time she was taken with the influenza. She partially recovered from this, and made two attempts to go back to school. Twice she failed, and twice went home. She was treated by another physician, and discharged as cured. Three or four days later I was called, as stated at the beginning of this paragraph, and found the following conditions: Temperature 103, pulse 130, respiration 24, free and muco-purulent expectoration, night-sweats, anorexia, and great prostration. Her respiration was catchy in both lungs, and accompanied by large and small moist râles on both sides. The percussion note was somewhat dulled on both sides, especially in the lower lobes. I believed that the girl had slid from the influenza into catarrhal pneumonia, and was likely to fall into acute miliary tuberculosis, and so informed the mother. I administered antipyretics and tonics, and later put her upon eucalyptol and cod-liver oil. A later examination of the

sputum revealed swarms of the bacillus tuberculosis. The case has been in my care now two months. The temperature averaged the first month about 102°, the second month 101°. The expectoration has grown much less. The respirations fell in two weeks to normal and have so remained ever since. The pulse has fallen from 130 to 96, where it stays. This may be normal for her, for the two grown sisters have the same rate of heart-beat, and they are perfectly well. Her appetite is returning and the bacilli have nearly disappeared from her sputa. The patient is still bedfast and in a precarious condition. Whatever the outcome may be, the fact is patent that the eucalyptol has done her much good. It looks as if it had averted the acute miliary tuberculosis, but also as if the patient were settling into a rapid phthisis, though no signs of cavities can be found, and no râles are now heard. The respiration has ceased to be catchy, and has become smooth in all the lung except in the upper lobe of the left lung, where it is harsh and tubular at this writing. It has been better here until a few days ago, when a sudden increase in the expectoration indicated the rupture of a tubercle. She has not menstruated for four months.

Case 13.—Mr. Allison, aged 20, came into my hands the first of April, 1891. This case is far gone with consumption. He had a temperature of 102°, pulse 110, and respirations 32. His expectoration was profuse and swarming with bacilli. He had night-sweats, tubular and jerky respiration in the left lung, pectoral pains, and was greatly emaciated. I had no expectation of producing any abiding change in the patient, but at once put him upon eucalyptol and cod-liver oil. In a fortnight his night-sweats were stopped and the expectoration reduced one-half. The patient has been benefited by the treatment, but will die. He has had one hæmorrhage since he has been in my care.

I am not putting eucalyptol forward as a specific for consumption, for it is not; but this experience has led me, as said in my opening paragraph, to put a high therapeutic value upon eucalyptol in persistent, irritable cough, chronic bronchitis, chronic interstitial pneumonia, and to a less degree in tuberculosis. Cases 1, 12 and 13 were certainly tubercular. There can be but little doubt that case 5 was tubercular. Five is well; there is some prospect that 12 will get well; 13 will die, and 1 is already dead. Case 7 was a case of gangrene of the lung, and is recovered. Cases 2, 3, 4, 6, 9 and 10 had symptoms of incipient phthisis. All are living, and in as good or better health than they were a year ago. Case 8 was a case of irritable cough. Case 10 is a case of chronic interstitial pneumonia. Eight is cured, and 10 is much improved.

Eucalyptol is very permeating. It is eliminated by the lung, the skin and the kidneys. It can be smelled upon the breath, upon the clothes when changed, and in the urine. It is antiseptic. It has a healing effect upon bronchial epithelium and a sedative effect upon the peripheral nerves in the respiratory tract. It is because of these physiological effects that the therapeutic results are produced.

I administer it in five to ten minim doses, in emulsion, every four hours.