

advice of a comrade, he wrapped some cobweb around the wounded part and then covered it with earth. Two or three days afterwards, finding the wound painful, he removed the cobweb and noticed that the wound had an unhealthy look. Again taking unskilled advice, he washed the wound with urine and covered it with lime. Twelve days after the accident he had difficulty in walking, and noticed that the injured toe and the rest of the foot were full of little punctures. These symptoms increased, and three days after a regular attack of traumatic tetanus supervened. When Dr. Sbrana saw the patient he observed the following phenomena: Complete trismus, risus sardoniacus, dysphagia, difficulty in breathing and in speaking, opisthotonos and complete rigidity of the muscles of the back and extremities. That evening Dr. Sbrana gave a hypodermic injection of phenic acid, 2 per cent., at the root of the injured toe, and next day he resected the necrosed phalanx. He continued to give three injections of phenic acid per diem. Three days after the operation the temperature returned to the normal (it had reached 38° C.—101.5° F.), and the symptoms of tetanus, especially the trismus, were favorably modified; the patient could open his mouth so that the forefinger could be placed between the teeth. After sixteen days' treatment the patient was cured. Dr. Sbrana remarked that, in this case, as well as the three others he had treated, the infection came from the ground, and that the agent that transmitted the microbe was evidently the cobweb. With regard to the injections of phenol, one cannot in this particular case neglect to note the curative influence of the rapid resection of the injured phalanx.

Dr. G. Ziengo, in *Gazzetta degli Ospedali et delle Cliniche*, October 9th, 1898, reports a case of tetanus following a complicated fracture in a man fifty-two years of age, and four days later tetanus was developed. Eight days after the first symptoms appeared Baccelli's treatment was begun, large doses of a 3 per cent. solution of phenol in distilled water being injected. As no symptoms of intolerance appeared, the daily dose of phenol was raised from 30 to 50 centigrammes and kept at that figure. With the exception of a little albuminuria no symptoms of poisoning were observed. In all 978 centigrammes of phenol were injected hypodermically during twenty-seven days. At first a daily dose of from 4 to 6 centigrammes of morphine was associated with the phenol, to relieve the insomnia and hyperesthesia which accompany the tetanic disease; but the morphine was soon laid aside, as the phenol appeared to answer all the indications. About the third day there was a slight amelioration of the patient's condition; nine days later the trismus disappeared, and on the twenty-third day the cure might be considered as certain.

This is the thirty-second case of tetanus treated by Baccelli's method of hypodermic injections of phenol. One death occurred out of the thirty-two cases, which is a grand result when one remembers that the general mortality of patients affected with tetanus is 70 per cent.