4. Apart from the minutes of the three meetings, the *Vermont* publication is almost entirely made up of essays compiled from standard authorities and eminent investigators. Dr. Dunsmore, however, presents a paper in which he contends against the too great weight recently given to the "dirt theory" in accounting for typhoid fever. He certainly convicts some of its advocates of bad logic and unfounded inferences. His own style, however, is so careless that in some places it is difficult to follow his thought.

Dr. Jaanes writes briefly in favour of amputation at the knee-joint, preserving the patella and the condyles of the femur.

B. L. R.

ART. XLII.—*Die Kriegs-Chirurgie der letzten 150 Jahre in Preussen. Rede gehalten zur Feier des Stiftungstages der militärärztlichen Bildungs-Anstalten am 2 August, 1876.* Von Dr. E. GURLT, Professor der Chirurgie an der König Friedrich Wilhelms Universität zu Berlin.

Military Surgery during the past 150 years in Prussia; Oration delivered on the Anniversary of the Military Medical School on the 2d of August, 1876, by Dr. E. GURLT, Professor of Surgery, etc.

THE nature of the pamphlet before us is such as to preclude the possibility of giving an abstract of its contents without copious quotations, and we must, therefore, limit ourselves to referring to a few salient points in this truly meritorious production.

The orator has traced, in a most graphic style, the development of military surgery through the numerous campaigns, beginning with the year 1713. He has pointed out the character, the labours and trials, the rank and pay of the army surgeon, the notable improvements in army medical matters and educational institutions. We are informed that the germs of the present medical school were planted by King Friedrich Wilhelm I. in 1713, in establishing the Thestrum Anatomicum, principally devoted to the teaching of anatomy. In 1724 lectures on medicine, surgery, botany, and chemistry, were added; and thus the Collegium Medico-Chirurgicum, for the training of medico-surgeons for the country and the army, established. This institution is the predecessor of what is to-day known as the "Friedrich Wilhelms Universität." In 1727 the Charité Hospital at Berlin was founded, and assisted materially in the training of military surgeons. As early as 1725, through the efforts of Dr. Joh. Theod. Eller, a law was enacted requiring all physicians and surgeons, in order to practise their profession in Prussia, to pass the State Examining Board. In spite of these conditions, we are told that they were insufficient to secure a well-educated corps of army surgeons, and that by far the largest number had to be recruited from the barber-shops; and that owing to the then existing difference in education between physicians and surgeons, the latter occupied a very subordinate position both in the army and in society. It is, therefore, surprising how some of these ex-barbers advanced in the respective grades, and attained finally the highest position in the Army Medical Department. Frederick the Great apparently sought to elevate the tone of the Prussian Medical Corps by sending a number of surgeons to France for the purpose of enlarging their experience and knowledge, and by inviting to Prussia a number of French surgeons for the purpose of teaching and demonstrating the art of military surgery.

Prof. Gurlt dwells especially upon the hospital system, methods of treatment, and means of transportation of the sick and wounded during the "Seven Years' War,"

and refers to the three great men of that period, viz., Schmecker, Bilguer, and Theden, who as First, Second, and Third Surgeon-General, had charge of the medical affairs of the separate armies. These three men are known for their writings, which contain many valuable and interesting observations to which the orator frequently refers. Bilguer is known as an extremely zealous advocate of conservative surgery, but his remarks on typhus and dysentery, as observed in the Bavarian campaign of 1778, are not without interest. He attributes many of the deaths to the miserable fare and care of the artillery-men; refers to the fact that patients treated in provisional frame hospitals, with plenty of light and ventilation as obtained through numerous small holes in the walls, were more successfully treated than others in permanent, but ill-adapted houses. We also like the remark when he says: "Brockleshy is perfectly right when he insists that a physician or surgeon in charge of a hospital should have as much power there as a commanding general in the field."

Theden is especially known as the originator of the present system of bandaging the limbs from below upwards, for his elastic catheter, evaporating lotions, and successful attempts to substitute local compression for ligation of arteries in ablation of limbs. His experience in the use of cold water in surgical affections is also of importance. He was taught the use of this simple but powerful agent as early as 1742 by Drs. Sigmond Hahn and son, who were educated physicians, and not hydropaths in the present acceptance of the term. Theden says: "I owe it to Dr. Hahn, that I have succeeded, in spite of the hypotheses of the old and new practitioners, to disperse, by means of cold water, dangerous inflammations, and to have found it a useful remedy in many internal affections." He describes the use of water in typhus and acute mania, and speaks of excellent results. Mursinnan and his writings are next referred to.

In 1797, after the death of Theden, Johan Goercke succeeded him as the Chief of the Medical Bureau. When yet a subordinate, he submitted, in 1793, plans for the establishment of Flying Hospitals for 1000 wounded each, which were speedily approved and adopted. He also introduced, in 1795, after the English pattern, improved spring wagons for the transportation of wounded, and is favourably known as a teacher of the Military Medical School. Under his administration extensive barrack hospitals were erected, and water transportation for the sick and wounded largely resorted to.

During the period from 1812-1815, numerous societies for the relief of sick and wounded, and the system of volunteer nurses developed throughout Germany. On the recommendation of Goercke, orders were issued providing for the formation of companies, 150 men for each brigade, for the purpose of carrying the wounded to the field hospital. Owing doubtless to the exigencies of the service, this order was not carried into effect until 1854; and ten years later, in the Danish war, these companies were tested for the first time in the field.

The writings of v. Gräfe, Benedict, and Rust, their sphere of activity in the army, and as teachers, are alluded to; also the gradual changes in the efficiency of the Corps and the Army medical system. Dr. v. Wiebel succeeded Goercke as Surgeon-General, and Dr. Lohmeyer was appointed after Wiebel's death. Dr. Grimm, the present Chief, succeeded Lohmeyer in 1851. Von Langenbeck, Stromeyer, and Esmarch—especially the former—receive due credit for systematizing, so to speak, the operations for excision of joints in gunshot wounds.

Prof. Gurlt's oration appears to have been prepared with great care and industry, and contains information of great value to all interested in the history and progress of military surgery.

G. M. K.