

CHAPTER IV.

Distinction between Surgery as practiced in the Army and in Civil Life—
Soldiers as Patients, and the Character of the Injuries to which they
are liable—Some Peculiarities in the Wounds and Injuries seen during
the late War.

THAT military surgery does not differ from the surgery of civil life, is an assertion which is true in letter, but not in spirit. As a science, surgery, wherever practiced, is one and indivisible; but as an art, it varies according to the peculiar nature of the injuries with which it has to deal, and with the circumstances in which it falls to be exercised. To the surgeon practicing in the camp, many accidents are presented which seldom or never come within the observation of the civil practitioner; while not a few of the cases which are daily treated in domestic life, rarely come under the charge of the military surgeon. The two classes of practitioners may be said to be engaged in separate departments of the same profession, which, though uniting occasionally, are yet tolerably distinct from one another.

The military surgeon during peace enters for a time into civil life; but during war he is called upon to exercise the very highest functions of his profession, and has little to do with the more trivial accidents which constitute the sum of a private practitioner's daily routine. His observation is undoubtedly restricted to a smaller variety of cases. He sees less than the civilian of the modifications which are impressed upon disease by age and sex; but in war he has a wider field for noticing the influence of external circumstances, of extremes of climate, of variations in food, work, and shelter on the same men, as well as the effects of mental

causes, as seen in the exultation of victory and in the prostration and dejection of defeat.

But though there may exist such distinctions between the spheres of the military and those of the civil surgeon, there is surely nothing in the exercise of their different callings which should create an antagonism between them. They are both members of the same priesthood, whose office it is to minister to suffering man, and the experiences collected by each should be willingly laid as common offerings on the altar of science.

To no class of professional men is a liberal education more important than to the army surgeon. To command that respect which is necessary for the right exercise of his official duties, he must be superior in general knowledge to his comrades. The many countries and varied climates to which he is sent, and the delicate positions in which his service often places him, demand the possession of an enlarged and well-stored mind; while the deep responsibility attached to the charge of such a number of valuable lives, and the necessity imposed by the absence of a "consultant" of deciding the most critical cases on his own unaided judgment, demand the firm self-reliance founded on clear knowledge as essential to any measure of success. Even amid the falling ranks, where he is exposed to as great danger as any, he must completely forget self, and give his whole mind to the condition of the sufferers around him; for often do his decisions, formed in a mere instant of time, settle for life or death the fate of the fellow-being before him. Then his powers of observation must be so well trained that he can discriminate between different diseases, whose types are mingled and masked by their union, as these are only seen in armies in the time of war.

The hardships incident to a soldier's life fall equally on the surgeon as upon his comrades; and, besides the dangers of battle and exposure, he runs the risk of those epidemic diseases which devastate armies, and which are the product of

exciting causes, to which he has been as liable as any of those actually seized, and to the infection of which, when developed, he is ever exposed. In civil practice, on the other hand, a surgeon is not subjected to those predisposing and exciting causes of disease—cold, want of food and clothing, etc.—which cause its appearance among the mass of the population, nor does he remain exposed to its infection longer than is necessary to prescribe for his patient. The want of libraries for study and self-improvement are also drawbacks to the exercise of the profession in armies, of which the civilian has no experience.

The strict discipline which prevails in military hospitals gives the army surgeon some advantages over the civilian in the treatment of his cases. No interference from the ill-judged kindness of relatives, or from the headstrong willfulness of the patient himself, can occur. His opinion is a law from which there is no appeal, and thus fewer obstacles stand in the way of his giving a fair trial to remedies. He has, also, the advantages so often denied the civilian, of correcting or confirming his diagnosis and treatment by after-death examination—a point of the greatest moment. He can, in general, exercise his judgment also to the fullest without having his decision criticised by a host of ignorant censors, and thus the moot points in surgery can often be determined by him in a manner not permissible in civil life.

The greater uniformity in age, constitution, and external circumstances that is to be found among patients in the public services than among the mass of the population who enter civil hospitals, makes conclusions drawn from their treatment more reliable for future guidance in dealing with them, than any statistics derived from civil practice can be for general purposes.

But how different are the means of treating injury in the field and in civil life! The ample space, established routine, careful nursing, many comforts and appliances of a civil hospital contrast strongly with the temporary nature, hurried

extemporized inventions, and incomplete arrangements of a military hospital in the field.

The influx of patients from the works of a besieging force, or the shifting from place to place of an army during a campaign, makes the removal of the sick to the rear a necessity. Then, as this transference has often to be accomplished by means little adapted for the purpose, and at a period of the treatment the worst fitted for its execution, the evil done is often irreparable; so that injuries which might be completely cured in stationary hospitals, have often to be relieved by amputation, while others whose treatment might, under more favorable circumstances, have afforded a fair prospect of success, are placed beyond recovery. From this it follows that the military surgeon cannot always choose either his own time or circumstances in performing his operations. He must be content to do the best he can in the crisis, and thus his experience has sometimes to be sacrificed to expediency. His operations, too, often differ widely from the classic procedures of civil life. The adage, that "a good anatomist may operate in any way," has often in him its illustration. The object being to save as much as possible, compels him to tax his ingenuity in order to take advantage of the eccentric manner in which the ball has half accomplished the severance of the limb, and to seize his flaps here and there where they may be got; and thus, though the immediate result may not appear so satisfactory, the final end is probably as effectively secured. In the practice of field surgery, moreover, methods of operating will often succeed which are not adapted for civil practice. Thus, in the resection of joints which come to be performed in the field, a comparatively small and simple incision will enable the operator to remove the injured parts, while in those cases in which the operation is commonly performed in civil life, a much larger and more complex incision is generally required in order to permit of the extraction of the enlarged, adherent, unbroken bone which has to be re-

moved, and perhaps to allow of the excision of part of the articular cavity at the same time.

As contrasted with the duties of the naval surgeon, those of the military surgeon are much more difficult. His patients are widely scattered, do not come so soon under his care when injured, are subjected to greater hardships, both immediately after being wounded and during treatment, than are the patients of the naval surgeon. "The sailor fights at home," while the unfortunate soldier has often much suffering to go through before he is admitted into hospital.

The soldier as a patient differs from the civilian in several well-marked points. In some respects he is a better patient, and in many respects he is a much worse one. Some of these points of distinction should always be borne in mind when estimating the success of surgery as practiced in the case of the one or the other.

Chosen when young from the mass of the population on account of his physical promise; selected with care during peace, with less discrimination during war, the soldier at starting is advantageously contrasted with the majority of the men of his own age. Chosen without any reference to his moral character, he is not uncommonly depraved and profligate in his habits, and has perhaps enlisted in the recklessness which succeeds to debauch, or as a last resource to save him from penury. We have thus, not unfrequently, two conditions meeting in the young recruit, both of which bear their own fruit in his future history—a tendency to indulge in vices which lead to disease, but a state of health in which disease has not been as yet established.

Taken from a domestic life in which he had possibly every liberty as to the disposal of his time, the formation of his habits, and the pursuit of his amusements, he is at once placed under the rigors of a discipline which soon becomes irksome. He enjoys little leisure, but is harassed by his unaccustomed, and, for a time at least, laborious duties. Nostalgia succeeds, and thus the period of acclimatization, as it

may be termed, becomes an ordeal so trying as in many instances to implant the germs of disease. The prejudicial effects of this initiation will be the more sure, if the recruit be launched into the real business of a war camp before his constitution has had time to accommodate itself to the new condition of things in which it is for the future to exist. But if the young soldier get over this novitiate, then his physical condition, during a time of peace at least, is undoubtedly favorable as contrasted with his fellow in civil life. His food, which is well adapted for his use, is provided for him regularly. He is systematically exercised. His hours of labor and repose are carefully arranged, and he is at all times liberally supplied with fresh air. The civilian, on the other hand, though not subjected to the rough change of existence which the soldier has to undergo, is greatly less regular in his mode of life. He lives frequently in close streets and airless dwellings. His food is irregular, varying with the profits of his labor. He indulges without restraint when he can afford it, and has to submit to privation afterward to compensate for the excess.

In war, again, the soldier loses many of his advantages over the civilian. The external circumstances which predispose to or generate disease are more numerous and vastly more potent in his case than they ever are in civil life. The exposure, the bad and irregular food, the deficient shelter, the excessive fatigue, the unnatural excitement or depression of victory or defeat, all tend to reduce him as much below as he was formerly above the civilian in the scale of health. He has, amid "the irregularities of war," opportunities for licentiousness of which he is not slow to take advantage, and his unquiet and exciting life is but too apt to occasion that "debility of excess" which conceals a constitution weak to resist injury, under an outward appearance of strength and vigor. Thus it is, that as in civil life different trades produce different diseases, so a soldier's life, both in peace and

war, begets its own diseases, and secures exemption from others to which civilians are liable.

Morally as well as physically the sick soldier differs from the inmate of a civil hospital. If wounded, he received his injury in the discharge of his duty; if sick, in the fulfillment of praiseworthy service. His "honorable scars" recognize none of those causes referable to misconduct or stupid thoughtlessness, which so frequently make the civilian the inmate of a hospital. He has no fear like the civilian for the future, if incapacitated for further service, as he knows that his misfortune will entitle him to sustenance for the time to come, and that his country will regard him with gratitude.

When struck down by sickness, the soldier is, however, thrown more upon himself than the civilian, and this isolation must in his case act prejudicially on his recovery. He has no visits from sympathizing friends, as he lies on a sick bed, far from home, amid the selfish hardness of a camp. He is soon separated from his comrades, and placed among strangers gathered like himself from the accidents of the field, and he finds himself in circumstances where he has little to cheer but much to depress him. In the injuries to which he is exposed in war, he is more hardly dealt with than the civilian. The accidents which befall him equal in their severity the most terrible which occur in civil life. The effects produced by the massive round shot or ponderous shell are very like the crushing and tearing of machinery impelled by the resistless steam; so that, among the many assimilating effects of our railways and manufactories, one will evidently be, in course of time, the bringing of the surgery in civil hospitals more and more into conformity with that of war.

But, besides all that I have said as to those matters in which military and civil surgery are similar or disagree, and as to the contrast which exists on some points between the patients falling to be treated in either case, there are yet some circumstances in the late war to which I must allude,

as they are peculiar in themselves, and have an especial bearing on its surgical annals.

A siege differs considerably from ordinary campaign work both in the description and mortality of the wounds to which it exposes the soldier. The close proximity of the opposed batteries, the steady and deadly aim which can be obtained by the riflemen, the range so soon ascertained for cannon and mortar, the guns so carefully and accurately worked from the absence of hurry and from the daily practice of the gunners, all contribute to render the proportion of casualties higher and their severity greater in sieges than the injuries which attend a campaign in the field. Wounds of the upper half of the body may be expected to be more common in a siege, from the lower parts being protected by the works, and shell wounds must also be of more frequent occurrence, from the larger employment of mortars in attacking or defending a city.* The sudden sorties from the beleaguered garrison, the long and constant exposure to the enemy's fire while forming and guarding the trenches, all conduce to swell the number of those injured.

The health of the troops, moreover, does not maintain so high a standard when they are stationary, and want the wholesome animation which results from the change and stirring incidents of a moving campaign; whence it follows that, on becoming inmates of the hospital, they are not so fit to stand active treatment, nor are they so "lively at recovery."

However, there is one advantage which a siege has over a campaign in the field, and it is a considerable one. The hospitals, being more stationary, can be better arranged, and

* In the civil insurrections of Paris, they observed the greater frequency of wounds in the upper part of the body, and the consequently greater mortality among the revolted, who fired from windows and behind barricades, than among the soldiers, who occupied the open street.