AK-SAR-BEN GREETERS—Men who extend the glad hand to visitors for the king. These are (left to right): Front Row —F. W. Fitch, George H. Dodds, M. E. Larsen, H. T. Cutler, H. K. Burket, Dr. H. A. Foster, H. C. Hartry. Center—A. A. Alwine, Lou E. Adams, R. L. Manzey, J. T. Dysart. Back—N. L. Sjolin, H. G. Moran.

TELLS U. S. DOCTORS OF WAR PRACTICE

Swiss Surgeon Reviews Three Years' Work at Front for Benefit of Medics Going Abroad.

In order that physicians and surgeons in the United States who expect to serve at the various European fronts may know just what practice at these fronts is, Dr. Charles Green Cumston of Geneva, Switzerland, privat-docent at the University of Geneva, etc., has written for the Medical Record as follows under the title "Some Reflections on the Surgery of War, Viewed After Three Years."

"The following desultory remarks are offered to the men who are to take the field and have so far remained in the United States, far from the centers of action. It will be evident that what is to follow is merely a very incomplete summary of the present surgical situation, but it may in a few words give a general idea of practice at the front.

"The surgery of warfare so greatly differs from what surgeons have been used to that it was at first a surprise to all to encounter so great a number of cases that civil practice had insufficiently known. Unquestionably, the great surgical principles remained unchanged, but the very nature of the wounds of warfare, the reactions of the injured, and the surroundings in general created absolutely new conditions for which adaptation was necessary. But this requisite adaptation rapidly took place, and a new war surgery has resulted, doing away with all the theories of gunshot wounds formulated as a consequence of the Russo-Japanese and Balkan wars.

New War Surgery.

"The first fact which has been acquired is that most wounds or injuries are due to rifle bullets, grenades, bursting shells, etc., and that bayonet wounds are very rare. In some of my lecture notes published in the Boston Medical and Surgical Journal and in the New York Medical Journal at the beginning of the war I at that time prognosticated that such would be the case, because that fighting with bayonets in hand-to-hand struggles would be limited in extent, and also because a bayonet wound would be more likely to be driven home in the abdomen or thorax, thus wounding the important structures and blood vessels particularly, with instantly fatal results, and such has been the case, with, of course, some few exceptions, particularly so far as the limbs are concerned.

"Another point to which attention should be called is the almost invariable infection of wounds. Every wound, with the exception of a 'seton shot,' must be looked upon as infected from the start. A rise in temperature will be present within a few hours after the injury, the index of a commencing septic process. The etiological factors of wound infection in war are legion, but injuries resulting from a spent bullet or bursting shell are invariably soiled with earth and bits of clothing, the latter containing in its meshes numbers of anaerobic bacteria, the former containing the tetanus bacillus.

"Very frequently the medical post on the firing line is so incumbered during action that only summary attention can be given to many injuries, while the transport of the injured in such great numbers often under the most adverse conditions, is among the multiple but unfortunately unavoidable causes favoring infection.

Value of Rest and Calm.

"Within a few days, not infrequently within twenty-four hours of proper treatment at a hospital or ambulance at the rear, a rapid improvement becomes visible in many severely injured. After a few days of rest and calm the temperature reaches the normal and for this reason it is incumbent for the surgeons at the front to get their wounded to the rear in all cases where the patient will be able to bear the transportation.

"It may be said in a general way that wounds in warfare suppurate until their complete cicatrization, regardless of the most minute aseptic and antiseptic treatment. The causes are the very nature of the injury, in the first place. The entrance and exit openings of a bullet which has gone through a limb have a decided tendency to close, often within a day or two after receipt of the injury, while the tract still contains foreign bodies of all sorts, particularly bits of clothing. If the bone has been injured, splinters will be present in the traumatic focus, and those detached from the periosteum will act as foreign bodies and increase the progress of infection.

"Bullets and pieces of shell or shrapnel shot frequently become encysted without producing any disorders if they do not involve a nerve trunk or large blood vessel. But with the exception of bullets these foreign bodies practically always carry dirt and bits of clothing into the wound, and these cannot be diagnosed, but it must be taken for granted that they are there. Therefore, every wound must be freely opened, exposed, and all foreign bodies removed.

"Besides projectiles, one often finds other foreign bodies in the wound, such as buttons; and I know of a case of a large abscess on the thigh from which, after incision, the remains of the soldier's watch was removed.

"Given these septic lesions, it is evident that antisepsis is to be relied upon much more than in civil practice. Carbolic acid is an excellent antiseptic, but has now been given up, very largely on account of poisoning, which which was largely noted by English and Canadian surgeons. Dakin's solution is of value and should be employed in spite of much adverse criticism to which it has, and, I think most unjustly, been subjected.

Use of Antiseptics.

"I am of the opinion that ether is a very superior antiseptic, and its use in peritonitis and large injuries to the joints and limbs, I can confidently recommend. It is indicated in vast cavities which are not easily drained, such, for example, as compound fractures of the thigh. Space does not permit me to consider many other excellent antiseptics, but I would particularly mention irrigation with a 1:200,000 silver nitrate solution according to the method of Denyze, when disinfection combined with stimulating action is required.

"Correct statistics can only be made after the war is over, but certain facts are nevertheless striking. Unquestionably vast fracture wounds are the most common, and it is also evident that since the use of Adrien's metal helmet injuries of the skull and brain have decreased quite notably.

"In order of frequency fractures of the thigh come first, after which come those of the leg and humerus. I am also of the opinion that fractures of the leg more frequently escape the effects of conservative treatment and necessitate amputation, and after them come fractures of the thigh. Fractures of the humerus seem generally to consolidate quickly after proper immobilization has been obtained.

"Open fracture of the femur always seem the most serious at first, because the vast wound is usually accompanied by a focus difficult to drain, but if muscular contraction is overcome and carefully guarded against the prognoses in many cases will not prove to be as bad as when the case was first seen. On the whole, amputations of the thigh have not been considerable during the war.

"After free exposure of the wound focus and removal of the bone splinters and foreign bodies, if the suppuration is free and the fracture easy to keep reduced, some simple splint may be all that is required in some cases, but the best results are unquestionably obtained by extension apparatuses. Of course, when the wound needs frequent daily dressings the plaster of paris collar splints, with galvanized tin joining brackets, are the only type to be employed.

The Question of Amputation.

"When the suppuration continues, and shows no inclination to diminish in infected cases, with a progressive decline of the patient's general health from sepsis, the question of amputation comes up for consideration. It is better to be conservative in regard to removing a limb, and it is better to temporize within the limits of safety, because we have all seen cases in which amputation was judged necessary by some, but the patients recovered with their limbs, although not in perfect condition, still with a consolidation that was quite acceptable.

"Wounds of the thorax and abdomen, naturally penetrating ones, require more space than I can give, but I may say that, contrary to what was thought at the beginning of this war, most surgeons are now convinced that when one can operate in proper surroundings a laparotomy (opening the abdomen) should be done at once, even in an ambulance behind the line, and results have justified this conclusion. Penetrating wounds of the thorax involving the heart or lung constitutes a subject too long to be discussed, but I would say that at the ambulance, after cleaning the surrounding skin, a very tight binder should be applied, morphine given to ease the dyspnea, (shortness of breath), and the case then watched for further developments.

"It is astonishing how well a large percentage of thoracic wounds do. Empvema (abcess of the lung) is very prone to occur, but resection of one or two ribs and pleurotomy have usually mastered the situation, even when it appeared desperate."

Persistent Advertising Is the Road to Success.

Victor Motor Co. Takes New Business

Announcement was made last week to the effect that the Victor Motor Car company will take over the business of the McShane Motor company, which has had the Hupmobile and Mercer.

The new firm will locate in the Hupmobile building and has planned to add to the equipment of the McShane Motor company quite materially in order that better service facilities may be at the disposal of car owners.

The personnel of the Victor Motor Car company includes V. I. Jeep, C. L. Modesitt and C. C. Denny, whose names have been connected with the recent opening of the potash fields in western Nebraska. Their interests in the potash activities assures people of this community that they are able financially to build up a strong organization for their new endeavor.