consists of many variaties of streptococci. but the one most commonly associated with apical abscesses is S. viridans or mitior. In a study of the bacteriology of 130 such abscesses, streptococci were found in 124, and with a few exceptions were of the viridans type. From the point of view of virulence this variety does not seem to be as active as the hemolytic. It, however, is found in the same localities and, without doubt, is able to cause serious conditions. lesions caused by it seem to be of a less acute form, the acute inflammation is not so common. Microscopic examination of the tissues attacked bears out the clinical observations. If the foci in the heart muscle are examined it will be found that they show the presence of lymphocytes, fibroblasts and a few giant cells. In the older areas distinct fibrous scars may be found. When the infection is due to hemolytic streptococci the lesions are minute abscesses filled with pus and surrounded by an area of leucocytic infiltration.

The general practitioner, however, is not so much concerned with the variety of organism present as he is with the fact that focal inflammations are commonly caused by the S. viridans and that this same organism can give rise to systemic infections. Of this there can be no doubt as the observations of many men in many parts of the world have confirmed the results. The bacteria have been found in the focal infections, similar organisms have been found in the secondary areas, and animal inoculations have reproduced the lesions. There is no proof lacking that we are dealing with cause and effect. Therefore every practitioner who makes the diagnosis of an apical abscess must remember that he is dealing with a condition that has the potential power of causing very serious trouble. In many instances there will be no ill effects, but the possibilities must always be considered.

## "COME-CLEAN."

By Major Leonard G. Mitchell, D. C., U. S. A.
Read by Major Eby.

(Read before the National Dental Association at Its Twenty-third Annual Session, New Orleans, La., October 20-24, 1919.)

THE three-reel motion picture we are about to see, was made at the Army Medical Museum, for the purpose of teaching our soldiers the importance of freeing the mouth of all infection and maintaining mouth hygiene. This picture was made by direction of, and endorsed by, the Surgeon-General of the army.

In order that the scientific part of this

picture might be above criticism, we secured the services of Colonel Frank Billings to assist in that part wherein we trace infection from the mouth to various parts of the body. The scenario is based upon that written by Doctor A. C. Fones. The only experienced man appearing on the screen is Mr. Nate Watts, who takes the part of Tom Merrill.

It was not possible for the Museum to

begin making this picture until after the Armistice was signed, therefore it was made under difficulties. The first official showing was viewed by the Surgeon-General and about twenty heads of De-The film was then three partments. and one-half reels. It has since been cut to a little less than three reels. Thirty copies of this picture have been allowed. The Division of Educational Extension, Visual Instruction Section of the Department of the Interior, will distribute twenty-three copies in as many states. This department contemplates making more copies in the near future so they may cover the entire United States. One copy has been assigned to the United States Public Health Service and is being used by Major Butler of that department. The remaining copies are being distributed by the Army Medical Museum to Army Camps and Posts. Copies will also be supplied, upon application, to other organizations in civil life. lecture, duly approved by the Surgeon-General's office, will accompany each copy, to be read or used as an outline for a lecture.

This degree of recognition of the importance of dentistry by the army, the department of the Interior and the United States Public Health Service, together with the wonderful impetus which the war has given to dentistry thruout the country, easily marks this period as epochal. In a comparatively short time, the demand for dental service in this country will greatly exceed the supply. This period may also be regarded as epochal from another standpoint,-for while the Nation is being taught the importance of month hygiene and dental service, it is also learning some of the causes of mouth infection and its influence upon the body,—causes which are not always complimentary to our profession.

This war has given many dental

officers an unusual opportunity for a close-up view of dental work from all sections of the country, not only seeing the work in the mouths of thousands of soldiers, but also many thousands of X-ray pictures. Early in the war we began using the X-ray extensively. Modern X-ray equipment was installed in every hospital and camp, and a routine practice established of X-raying all suspicious cases.

Because of the seriousness of the situation, may we briefly note the conditions in a general way: The dental officers, whose duties required them to examine the mouths of all recruits, declare the per cent of dental work which produces pathological conditions is appalling. The roentgenologists who have done dental radiography go still further—a number of them state it is a rare occurrence to find a root-canal reasonably well filled.

It seems unfortunate that we are so isolated in our work, compared with the surgeon. With the surgeon, there is a constant check-up on his work. environment, with other scientificallytrained men and nurses interested, practically insures skillful and aseptic operative procedure. No such atmosphere surrounds the dentist,—there is no probability of a check-up on his opera-However, it is most gratifying to note the marked increase in the number of modern crowns and bridges wherein the dental pulp has not been sacrificed and where more sanitary conditions are possible. It is most encouraging for this branch of constructive dentistry. If we can but bring up the other sectors to this front-line trench, we will be ready to go over the top!

Is not this epochal period in dental history a most favorable time to start a drive thruout the country for general improvement in the common every-day operations,—the operations every dentist knows how to do and is called upon to do every day? This drive should be conducted thru "channels,"—society meetings and journals. The results would surely justify the means, even tho it necessitated a temporary discontinuance of attention to new things.

The United States government is now, as you know, in the midst of a nationwide campaign of education along lines which have for their aim and purpose a more virile and stronger people. The dental profession is and will be a most potent factor in this great campaign which surpasses any like effort in the history of the country. Doctor Ales Hrdlicka, Curator of the division of Physical Anthropology, United States National Museum, who has probably dug up more skeletons of prehistoric races in various parts of the world than any other man, and who has made a most exhaustive study of bone formation and evolution of jaws, makes the statement that dentistry is destined to take first place among the healing arts.

May we realize the importance of our part in this great campaign,—that the relation of mouth infection to disease of the body is one of the most serious problems confronting dentistry and American people today. May the leading men of dentistry temporarily leave the beaten

path of inclination and new discoveries for this more urgent need,—the crisis in our profession—and direct their large influence toward raising thruout the profession the standard of these common, every-day operations.

Thus may we render to society the service it has the right to expect, and fulfill our obligation to our countrymen.

The moving picture film illustrative of the paper of Dr. Mitchell, was here shown upon the screen, following which the following proceedings were had.

Burton Lee Thorpe, St. Louis, Mo.

I think you will all agree with me that this is a very beautiful film, not only for educating the layman, but also the dentist. This film ought to be shown forever and ever before all sorts of audiences on all occasions possible, and I move you, Mr. Chairman, that we, of this section, recognize the value of the film and our most hearty thanks to Major Eby for his kindness in showing this film, also by sending a telegram to Major Mitchell, our friend for many years in this section who has worked with us and contributed to this cause on many occasions, expressing our most hearty congratulations and thanks for the film, and our best wishes for his early recovery.

The motion was duly seconded and carried unanimously.