MEDICINE

## Fewer Die of Wounds

American medical officers are saving from five to nine times as many wounded soldiers as was possible in the first World War.

AMERICAN DOCTORS are saving from five to nine times as many soldiers from dying of battle wounds in this war as was possible in World War I, it appears from casualty figures announced by Major Gen. Norman T. Kirk, new Surgeon General of the U. S. Army, at the meeting of the American Medical Association in Chicago.

The figures he gave covered the period during the phases of the North African campaign before the Army moved up into northern Tunisia. The death rate at that time in the evacuation hospitals was from  $2\frac{1}{2}\%$  to  $3\frac{1}{2}\%$ , compared to a death rate of 15% to 18% in evacuation hospitals in the last war.

This remarkably low mortality was achieved in spite of great difficulties in evacuation. In some places eight-mile litter carries were necessary to get the wounded from the field to the ambulances. The ambulances had to travel 20 to 30 miles over mountain roads to evacuation hospitals.

For the future, the Army Medical Department hopes to have exclusive airplanes and possibly even helicopters for the evacuation of the wounded. So far in Africa, 13,000 sick and wounded have been evacuated by plane, Gen. Kirk said. But these evacuations were in planes used to take supplies forward. Helicopters are being experimented with but so far none is in actual service for evacuation of wounded.

Plasma, surgery and sulfa drugs were credited by Gen. Kirk in that order for the great saving in lives. Sulfa drugs will always come second to surgery and third to plasma in saving the wounded, he said. This is because shock and hemorrhage and bomb or shell fragments are the biggest threats to the life of the wounded.

Plasma is given at the clearing stations and sometimes at the collecting stations. At the evacuation hospitals, the surgeons clean the wounds, remove shell or bomb fragments and institute drainage. From 80% to 85% of the casualties, he said, are due to shell and bomb fragments, which carry more clothing and infection in the body than rifle bullets. In some

places, because of evacuation difficulties, auxiliary groups of surgeons were sent into the forward area to perform operations.

An astoundingly small number of wounded have had the serious bone infection, osteomyelitis, which occurred in 75% of compound fractures in the last war. In all the base hospitals in Africa, up to April 30, there were only 70 cases of this condition. In one group of 373 compound fractures, there were only five or six cases of infection instead of the 279 which the last war's 75% rate would have given.

The percentage of survivals in cases of head wounds is much greater than in the last war, as is the survival in cases of abdominal wounds, with even those coming to operation late largely surviving. Of great help for these cases, Gen. Kirk said, is the Levine tube, which goes into the stomach through the nose

and by suction keeps the stomach empty and prevents distention.

Most fracture cases are transported to the rear in plaster casts, but the casts must be padded, Army surgeons have learned. For fractures of long bones, Gen. Kirk is opposed to the method widely used in the Spanish Civil War, of keeping the leg or arm in a plaster cast until the bone sets. Traction is essential in these cases, he said.

Only 12 cases of gas gangrene, with one death, occurred while the Army was still in the South.

The Army has medical installations in every country in the world not held by the Axis, and as soon as it moves into Axis territory, it expects to set up medical units to care for the civilian population. This will be done, Gen. Kirk explained, in order to protect the Army from infectious diseases prevalent among civilians.

The general health of the Army in Africa has been excellent, better than was expected and better even than at home. Venereal diseases are the biggest health problem.

"We are going to need more doctors," Gen. Kirk declared. "We must have enough to win this war, and we haven't started fighting yet. Tunisia and Guadalcanal were only side plays."



CRASH TRUCK—Built for Army Air Forces, this truck is ready to rush to the scene of a crash and shoot hundreds of gallons of water on a burning plane, blacking out the fire and rescuing pilot and crew. Engineers of Mack Trucks, Inc., worked with the Fire Prevention Section of the U.S. Corps of Engineers in developing the unit.

He added that he appreciated fully the need for leaving enough doctors at home to care for the civilian population. He quoted Gen. Eisenhower as saying that the outstanding service of the whole A.E.F. was that rendered by the medical department.

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PSYCHOLOGY-SOCIOLOGY

## **Zoot-Suit Epidemic**

Movement is widely scattered over the United States without an official organization, but occasionally flares up in certain areas.

THE "ZOOT-SUIT" movement which caused serious difficulties with Navy, Army and other service groups in Los Angeles, exists in widely scattered localities over the United States, but flares up unexpectedly in "epidemic forms" in certain places and at certain times, according to a group of scientists who have studied the Zoot-Suiters in Detroit. Cities that have been most worried about them include besides Los Angeles, New York, Washington, D.C., and Detroit.

The Zoot-Suiters appear to be without any sort of official organization, although it had a distinct "uniform" even before it became a movement, Dr. Fritz Redl, of Wayne University's School of Public Affairs and Social Work, said in a report of the "Subcommittee on the Study of the 'Zoot-Suit' Movement" to the Detroit Association for the Study of Group Work.

At times the gangs are very loosely held together, if they exist at all, the members being merely a haphazard lot of jitterbugging youngsters. Then suddenly they may "congeal" into a unified group for intensive and sometimes threatening fighting such as is reported from Los Angeles.

The zoot-suit, originally just a dress fad intended as a part of the jitterbug dance, has become the visible signal for concerted action. It is, according to the report, "definitely a symbolic expression of potential unity of attack."

When the epidemic rages in a locality, according to the scientists, not only do more boys and girls join the jitterbugging Zoot-Suiters, but their behavior becomes more vehement and intense.

"The original basis of dance enjoyment seems to be brushed aside by an interest in tough-guy behavior, in alcoholic excesses, in rebelliously manifested freedom of inhibition in social relations with the other sex."

Although they have developed their own brand of double-talk language,

which they make a point to use only in addressing each other, the Zoot-Suiters have a tendency, the scientists state, "toward reckless extension of the freedom of behavior even toward non-members" and "get in trouble through doing so."

This would seem to have happened in Los Angeles, where servicemen have resented this "freedom."

The scientists have also observed trends "toward disturbance of the establishment they enter, and of immediate cohesion when attacked, toward violence and destruction on a large scale (tearing up plush seats, etc.) and toward the provocation of closed fights with local boys, bouncers and police.

The Zoot-Suiters include both white and colored groups and deterioration into gang vehemence and destructive orgies have occurred in both groups, the report states.

Warning against hysterical condemnation of all young Zoot-Suiters, because of present difficulties with service men in Los Angeles, was voiced by Dr. Redl in an interview.

Not all the youthful wearers of the zoot suit are criminals or delinquents, Dr. Redl emphasized. Among those who affect this peculiar dress are three entirely different groups, hard for the outsider to tell apart.

- 1. This group includes the enthusiastic jitterbugs who find the orgies of this wild form of dancing a release to restless emotions.
- 2. Another type of Zoot-Suiter wears this sort of clothing as a chronic sort of irritation in the age-old friction between youth and adult. To them the zoot suit is merely a clothing fad.
- 3. But there is some delinquent gang formation under cover of the zoot suit either for general destructiveness or for more or less organized crime.

To glamorize the Zoot-Suiters by hysterical over-excitement and notoriety or over-condemnation is not the way to reduce interest in the Zoot-Suit movement on the part of the young people who are appealed to by it, Dr. Redl pointed out.

The movement now appeals to youngsters of a special type and social and economic background whose needs are obviously not covered by any of the official adult-dominated youth organizations and agencies. And, Dr. Redl said, it is the beginning of the only spontaneous youth movement so far appealing to these young people.

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ENGINEERING

## Carrier for Torpedo Boats Would Stow Them in Hold

MOST AMBITIOUS among the warlike inventions recently patented is a carrier craft for motor torpedo boats, analogous to an airplane carrier. This design is submitted by Carl T. Forsberg of New York, who has received patent 2,319,855. It provides stowage space for a number of deadly, swift little vessels in the hold of a broad-beamed ship. A control elevator lifts them out when action is imminent, and an overhead track crane carries them outboard and lowers them into the water.

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CHEMISTRY

## Sea Water Made Drinkable; Two Chemicals Remove Salt

THIRSTY MEN on life rafts will be able to produce safe drinking water from the sea, thanks to a new method perfected by the Naval Medical Research Institute at Bethesda, Md., and announced officially by the Navy.

Developed for use primarily on rubber life rafts carried on aircraft, the new method utilizes two chemical compounds, the composition of which is not revealed. These two chemicals are compressed into bars of soap size. Four plastic bags, each a quart in size, are needed to perform the chemical reactions that remove the salt and make the water drinkable.

Under life-raft emergency conditions, 11 times as much drinkable water as chemicals used is obtained.

The Navy credits the discovery of the process of removing sodium salts from sea water to Lt. (j.g.) Claire R. Spealman and Lt. William V. Consolazio, volunteer specialists, U.S.N.R.

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