

You might think that a burn would be sterile, all the germs killed by the heat that seared the flesh. Hospital experience, however, shows that this is not the case.

If you can get the patient to a doctor, hospital or burn station quickly, you do not need to put anything on the burn. Watch to see that clothing does not brush against it, that no one coughs, sneezes or, in the case of children, weeps into or onto the burn.

In case of an atom bomb attack, and often in other cases of burn injuries, it may not be possible to get the victim to medical aid very quickly. In such a case, put a sterile dressing on the burn to cover it and protect it both from the air and from germs.

The sterile dressing will help ease the pain. Any covering over a burn helps to stop the pain—but do not use just any covering. At Hiroshima people put rice flour, raw ground potato and cucumber juice on burns. This, says Dr. Everett Idris Evans, burn authority at Richmond, Va., “undoubtedly accounted for the widespread subsequent infection,” even though these substances apparently did relieve pain.

If you have no sterile dressings at hand, use the very cleanest cloth you have. Ironing the cloth or heating it in an oven will make it more nearly sterile and germ-free. Be careful when you put the dressing on and bandage it in place to avoid touching the burn or coughing or sneezing near it.

#### MEDICINE

## Mumps Vaccine Available

➤ A VACCINE against mumps will soon be available commercially. Two pharmaceutical manufacturing companies, Eli Lilly and Company of Indianapolis and Lederle Laboratories, Pearl River, N. Y., have been licensed by the National Institutes of Health in Washington to produce mumps vaccines. The Lederle product is now on the market.

Credit for making the first mumps vaccine in history has been given to Dr. Karl Habel of the U. S. National Institutes of Health. He first attacked the mumps problem in 1940, when Army, Navy and Public Health authorities were expecting large scale mumps outbreaks in military training camps such as occurred during World War I. Dr. Habel succeeded in getting the mumps virus to grow on chick embryos. Following this he prepared a vaccine on a laboratory scale. Unpublished results of success in trials with this vaccine in 1946 have led to development of the vaccines by the manufacturing houses.

At Lederle Laboratories, Dr. Victor Cabasso worked out development of the Lederle product under the direction of Dr. Herald R. Cox.

The vaccine is expected to be used chiefly in schools, camps and other institutions when outbreaks of mumps threaten. It probably will not be advised at present for

Nurses and doctors in hospitals wear face masks, you know, when dressing a burn to keep germs from their breath getting into the burn.

If the first sterile dressing does not relieve the pain, put another one on top of the first, without disturbing the first one. The second one very likely will stop the pain.

You can reassure a burn victim who complains of the pain by telling him that the painful burns are not the serious ones. This is because in serious burns, the nerve endings are destroyed and the patient does not feel any pain. Do not, however, tell this to the burn victim if he does not complain of pain.

Many people have a tube or jar of medicated burn ointment in the home medicine chest or first aid kit. Tannic acid was once widely used by doctors to treat burns and ointments containing it were widely sold. Later, doctors found that tannic acid was not good medicine for burns and now they do not advise it. Some burn ointments have medicines in them to relieve the pain. Most authorities now, however, advise that if you do use an ointment, you use a bland petrolatum ointment or jelly, such as Vaseline petroleum jelly.

Shock, the third thing the first aider must be prepared to handle in burn cases, is a subject for a lesson in itself, particularly since shock is something to consider in any major injury.

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#### BIOLOGY

## Virus Breeding May Be Weapon Against Disease

➤ RESULTS of virus breeding, which might become a new weapon in the fight against diseases such as influenza and poliomyelitis, were reported by Dr. Frank M. Burnet, director of the Walter and Eliza Hall Institute, Melbourne, Australia, at the New York Academy of Sciences in New York.

“Of high practical importance,” said Dr. Burnet was the discovery that the peculiar characteristics of one strain or type of influenza virus might under certain controlled conditions be acquired by another type of ‘flu virus.

In his laboratory he was able to transfer the characteristic of turning to nerve tissue, which is a characteristic of the polio virus, to another type which so far has developed no tendency to turn toward nerve tissue.

Although at present virus breeding is a research matter, a possible future application might be development of vaccines for preventing diseases such as influenza.

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#### PHYSICS

## Radiation Indicator Made 50 Times More Effective

➤ THE radiation indicator developed at the University of California at Los Angeles has been made “at least 50 times more effective” than the first model, it was reported.

To get this great increase, the alcohol preservative in the chloroform used in the indicator was removed, Dr. George V. Taplin of the University's staff announced. Dr. Taplin, who works on the University's Atomic Energy Project, first revealed the new radiation indicator last February.

The indicator is small, efficient and cheap, and can be made up in the shape of a cigarette lighter or a fountain pen. It contains chloroform and a purple dye. When struck by X-rays or gamma rays, the purple dye turns yellow.

“By removing the alcohol preservative in the chloroform, the production of hydrochloric acid is increased,” said Dr. Taplin, “thus making it at least 50 times more effective than previous models.”

The new device is called a “dosimeter” because it measures the “doses” of radiation that a person might receive when working near radioactive material or when he entered an atom-blasted area.

Dr. Taplin believes it will be valuable in three ways:

(1) As a general personnel monitoring badge.

(2) As an emergency personnel monitoring device for those engaged in rescue work.

(3) As a strategically-placed area monitoring device.

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