

by dim light in very cloudy weather is supported by experimental evidence at the Texas Agricultural Experiment Station as reported by Dr. A. A. Dunlap. (*Science*, Dec. 24, 1943)

Dr. Dunlap grew cotton plants in greenhouses where the light intensity could be closely controlled, and also placed black cloth covers over field-grown plants. Light intensities were cut down to a twelfth, and even nearly to a fortieth, of normal Texas cotton-field sunshine. The plants lost, on an average, three-fourths of their buds and green bolls, or squares.

*Science News Letter, January 8, 1944*

#### ORNITHOLOGY

### Giant Firecrackers Aid In Taking Bird Census

► WITH a ten-cent aerial bomb firecracker as a stimulant, male pheasants in a given five-mile area crow "present" to the census taker in a novel method of determining pheasant populations in game areas. H. Elliott McClure of the Nebraska Game, Forestation and Parks Commission describes this newly developed procedure. (*Journal of Wildlife Management*, January)

During a recent study on the calling of pheasants, Mr. McClure explains, it was noted that these birds responded by crowing following thunder, blasting, or shotgun explosions. Even such noises as the slamming of a car door or banging on a metal tub would stimulate them to crow. This peculiar response is the basis of Nebraska's pheasant-counting technique.

In taking the census, the census taker drives through the specific area from dawn until an hour after sunrise, the hours found to be best for pheasant response. At five-mile intervals, bombs are dropped and the responses counted.

One important weather restriction must be observed. Wind can spoil this method by carrying the sound of the bomb away or by preventing the distant calls of the pheasants from reaching the observer. The simple rule to be followed, therefore, is not to attempt to stimulate the birds by these bombs when there is a wind strong enough to blow out the match used to light the fuse.

"This method," Mr. McClure declares, "shows promise as compared with other methods of pheasant censusing, and when restrictions on the use of fireworks have been lifted, should be worth attempting in various states where the pheasant is important as a game bird."

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#### PHYSIOLOGY

## "Resuscitators" Dangerous

Warning issued by Yale University physiologist that new devices, like old "pulmotors," impede natural breathing and may be fatal.

► WARNING that thousands of lives are in danger because physicians are being misled into promoting the use of "resuscitators" for victims of carbon monoxide or other asphyxia is issued by Prof. Yandell Henderson, of Yale University. (*Science*, Dec. 24, 1943)

One of these devices, which Prof. Henderson had tested and given an adverse report on to the American Medical Association has been "accepted" instead of disapproved by that association, Prof. Henderson states. In this respect, he says, the medical association is in direct antagonism to the American Red Cross.

His objections to "resuscitators," which he says represent only a slight change from the old "pulmotors," are that the rhythm of the "resuscitators" does not correspond to that of the patient's natural breathing but opposes and impedes it, and that in severe cases of asphyxia if the pull and suck part of the apparatus is turned off and the inhalational part turned on the victim's death warrant is signed because the mask and valves are such that much of the carbon monoxide coming out of the lungs is re-inhaled instead of being eliminated.

An inhalator for reviving asphyxiated patients has been invented by Prof. Henderson and his associate, Prof. Howard W. Haggard. This device has never been patented, nor its manufacture, sale or use limited in any way. It provides a method of resuscitation by inhalation of oxygen with enough carbon dioxide to induce a maximum minute-volume of respiration.

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### Navy Uses Prone-Pressure

► THE NAVY'S Bureau of Medicine and Surgery, it was learned, has adopted the policy, in accordance with recommendations of the National Research Council, of emphasizing the Schafer prone-pressure manual method of artificial respiration to resuscitate victims of drowning, carbon monoxide asphyxia and the like.

The Bureau's policy is that no mechanical resuscitator should completely re-

place training of Navy personnel in the manual method of artificial respiration. Otherwise, it is felt, there might be a tendency to neglect training in the manual method and lives would be lost if personnel did not know this method at times when the mechanical resuscitators were not available because of destruction by bombing, for example.

The Bureau's policy statement also points out that with some types of mechanical resuscitators there is danger of injury to the lung tissue. The Bureau favors non-automatic inhalators to be used after breathing has been started by the manual method of artificial respiration. It favors the use of mechanical automatic resuscitators only if used by medical personnel in certain complicated cases such as patients with abdominal wounds for whom the prone pressure method might not be suitable.

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#### MEDICINE

### Special Operation For "Jeep Disease"

► A METHOD of operating for "jeep disease" which cuts the time the average soldier-patient must stay in the hospital from 68.4 to 22.6 days is reported by Maj. Paul N. Mutschmann and Lieut. George A. Mitchell, M.C., A.U.S. (*Journal, American Medical Association*, Jan. 1)

"Jeep disease" is the name given by another surgeon to pilonidal disease. This condition of cysts and sinuses at the base of the spine is greatly aggravated by vigorous military training and conditions of mechanized warfare.

The operation described by Maj. Mutschmann and Lieut. Mitchell is not a new one but a modification by which the operative wound is only partly closed instead of being sewed up tightly. With this method, they report, the soldier patient can be up and about on the sixth to ninth day after operation and back on duty in about 22 days. Compared with a previous method of operating, this method saved 2,392 days of hospitalization for 52 patients.

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