

lunar skies be bright enough to be seen at this distance.

"But that they occur must be as certain as that the brighter flashes which

would occur on an airless moon have never been observed," concluded Dr. Marshall.

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shire training camp and will go to Newfoundland posts for duty in November, according to reports received by the War Department.

Making good, in their case, means chiefly that the canine recruits have built up their fitness, by a strict regime of conditioning, like athletes, so that they can stand a winter of work in the cold. Antarctic exploration work is hard on dogs. Some of the canine veterans had become afflicted by snow blindness, as humans are when their eyes cannot stand the glare on ice and snow. The snow-blind dogs would run around wildly, and could not see well.

Newfoundland winter will be a comparatively mild experience for these dogs, the Remount Division of the Quartermaster Corps believes. Cold will be far less severe than South Polar blizzards. The dogs can have a better diet. Besides Army sergeants with veterinary medical knowledge, the dogs' trainers include a man who worked out several tight-packed rations for the Antarctic.

If the Antarctic dog veterans make good, the Army expects to expand the sled dog branch of the service, since dogs can be valuable in transport in the North beyond railway heads and in the interior. Huskies at their training kennel in Wonalancet, New Hampshire, are reported apt at learning "Gee" and "Haw" commands, just as army mules do.

Like soldiers on maneuvers, Army dogs are using ersatz equipment when need be. To imitate winter snow conditions in snowless New Hampshire in summer, the sergeant in charge of the dogs rigged up a sled on wheels with a hand brake.

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MILITARY SCIENCE

Anti-Aircraft Gunners Use Red Glasses

THE "red world of war" becomes a literal vision to anti-aircraft gunners firing tracer shells from the small-caliber pompoms—37 and 40 millimeter pieces that spit out rapid streams of death like over-size machine-guns. The gunners are now equipped with red glasses, because through them they can see the flaming course of the little shells in better contrast against the sky. The new glasses are said to work better than even binoculars with filters, especially on hazy days.

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NUTRITION

Three-Fourths of World Ill-Fed In Normal Times

Only Hope for Improving Human Nutrition Lies in World Wide and Economic Peace After This War

THREE-FOURTHS of the world's 2,000,000,000 people depend so heavily on potatoes and cereal crops for food that their bodies are likely to suffer damage from the ill-balanced diet.

So it appears from an impressive survey of what the world is accustomed to eating in such comparatively good times as the years before 1939. Dr. Merrill K. Bennett of the Food Research Institute, Stanford University, has reported the survey to the *Geographical Review* (July). He finds low income levels to blame for a great deal of the world's monotonous diet habits. And he declares that the only hope for improving human nutrition lies in a world-wide and economic peace, as well as a military and political peace, after the present war.

"The United States, with 130 million people, is conspicuously the largest national group in the world," Dr. Bennett states, "to enjoy a diet composed of cereals and potatoes to as small an extent as 30 to 40%."

All the other six countries that have national diets of this standard total together only about 85 million people. These are: Switzerland, Sweden and the United Kingdom in Europe; Canada, Australia and New Zealand.

All of Asia, excepting Japan, lives on 80 to 90% cereal and potato fare, in terms of calories. So does a great area of Africa, and also European Soviet Russia, says Dr. Bennett. The Americas and Australasia probably have no national groups accustomed to this degree of monotony, he points out. Japan is in the class of having a diet from 70 to 80% in the grain and potatoes class.

Southern Europe and most of South and Central America eat 60 to 70% cereals and potatoes; the rest of Europe ranges from 40 to 60%. A really liberal diet, according to one American nutri-

tionist, would contain only 21% of this food.

To illustrate for Americans the monotony of such diet, Dr. Bennett shows that an American man who lived on 80% cereals and potatoes, and consumed 3,000 calories of energy value a day, would have just 600 of those calories in foods other than grain and potatoes.

One liberal serving of beef or chops would alone use up the 600. Or instead, he might add these to his day's ration of one pound of white potatoes and one and one-quarter pounds of flour or meal: an apple, half an ounce of sugar, an ounce of bacon, half an ounce of vegetable oil, an ounce and a half of dried beans, half a pound of cabbage. These would add up to 600 calories. "Flavoring materials," most Americans would call this, says Dr. Bennett.

Religious taboos and other psychological factors may keep some countries in a groove of eating an ill-balanced diet and suffering the consequences in malnourishment, but Dr. Bennett concludes that the chief reason for this condition in the world is poverty. Nations, like families, he says, presumably eat mainly cereal foods and potatoes because they cannot afford variety.

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ZOOLOGY

Antarctic Dog Veterans Join Up for Army Service

THEY DIDN'T register for defense duty, but nearly 40 dog veterans that saw hard exploration service with the U. S. Antarctic Expedition in 1939-1940 are among the "selectees" who will aid American defense in the North this winter.

Thirty-seven out of 40 sled dogs have already made good in their New Hamp-