

radiations from penetrating the flesh and bones of anyone on the decks.

At the same time, hundred-foot waves were started, that sent deluges of green water, also radioactive, washing over the ships. These waves subsided to a tenth of their height before they had traveled three miles, but in the meantime they did their mischief. And even before they struck, the wracking shock wave had sped through the water like an earthquake, ripping hull plates open and starting even the stoutest of warships towards the bottom.

But of all the effects of this triple-threat weapon, radioactivity is by far the worst, in the opinion of Vice Adm. W. H. P. Blandy, who met the correspondents in a press conference before the showing of the films. Terming the bomb a "most insidious weapon," he pointed out that its effects might be felt not only by its immediate victims but that its "untold harm" might extend into future generations.

Adm. Blandy reiterated his wish to see the atom bomb effectively outlawed, not by mere pious words of renunciation but with a ban backed up by effective international action. If we cannot get that, he said, he is in favor of keeping the weapon and continuing research on it.

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MEDICINE

Minibunnies Used To Test Injection Fluids

► A NEW RACE of minibunnies, known as "Polish" rabbits, are proving helpful in tests for the safety of solutions to be injected into patients' veins, Dr. Carl E. Georgi, of the University of Nebraska, reported.

The salt solution frequently given patients after operations, sugar solution given as nourishment for patients unable to eat, and perhaps even blood plasma are among those which might be tested with the bunnies' aid. Full-sized rabbits are now used in testing these solutions for materials that might cause fever in the patient.

The Polish rabbits are miniature animals bred from white New Zealand rabbits, Dr. Georgi explained. Those which cannot qualify for show purposes can be obtained from dealers. These animals, slightly larger than the show animals, weigh about two and one-half to three and one-half pounds.

They take half the space usually required to keep animals for such pur-

poses and eat less, so that they can be left unattended over week-ends and holidays.

Another advantage is that less of the solution to be tested is needed, since the amount used is based on the weight of the test animal. With the usual large,

well-fed laboratory animal this often becomes such a big dose it is difficult to give. The vein in the ear, used for injecting the test solution, is satisfactory; and it is easy, Dr. Georgi said, to get accustomed to the smaller-sized ear.

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Books of the Week

AIR AFFAIRS: An International Quarterly Journal—*Air Affairs, Inc.*, 130 p., subscription \$5. per year. Vol. 1, No. 1.

APPLE QUALITY AND ITS EFFECT ON PRICE AND RATE OF SALE—G. E. Blanch—*Cornell University Agricultural Experiment Station*, 50 p., tables, paper, 5 cents. Bulletin 826.

APPLE-TREE PRUNING WOUNDS: Treatment and Healing in Sound and Winter-Injured Trees—D. S. Welch and L. H. MacDaniels—*Cornell University Agricultural Experiment Station*, 23 p., illus., paper, 5 cents. Bulletin 821.

FIRST DENVER CONGRESS ON AIR EDUCATION: Held at Denver, Colo., July 23 to 28, 1945. *University of Denver Press*, 139 p., \$2.50.

FROM THE RESEARCH LABORATORY TO THE ARMED FORCES—*Mellon Institute of Industrial Research*, 32 p., paper, free. Talks by specialists in wartime research on medicine, synthetic rubber, radio, etc.

INVENTING FOR PROFIT: Louis Chayka—*Humphries*, 205 p., \$2.50. This book is a fascinating revelation of those people who anxiously try their skill on improving all kinds of ideas. The chapters discuss the patent system, the requirements of the Patent Office, the ways to exploit inventions, and many allied subjects.

OFF TO A GOOD START: A Handbook for Modern Parents—Irma S. Black—*Harcourt*, 256 p., \$2.50. A nontechnical book about the day-to-day problems which confront the parents of small children.

PLANNING PROGRAMS FOR VETERANS IN RURAL AREAS: Edwin R. Hoskins—*Cornell University Agricultural Experiment Station*, 57 p., tables, paper, 10 cents. Bulletin 825.

PRINCIPLES OF DYNAMIC PSYCHIATRY—Jules H. Masserman, M.D.—*Saunders*, 322 p., illus., \$4. The book presents the fundamentals of dynamic psychology and clinical psychiatry briefly, clearly and systematically, and so prepares the student for clinical training in diagnoses and therapy through direct work with patients.

RESULTS TO DATE OF STUDIES OF THE DURABILITY OF NATIVE WOODS TREATED AND UNTREATED—C. N. Whitney—*Dept. of Agric., Northern Rocky Mountain Forest and Range Experiment Station*, 54 p., tables, paper, free. Station Paper No. 5.

SCIENTIFIC INSTRUMENTS—Herbert J. Cooper, ed.—*Chemical Publishing Co., Inc.*, 305 p., illus., \$6. A discussion of a wide range of instruments designed for making physical measurements. Not only laboratory instruments but also those used in the field, in industry and commerce are covered.

THE SPECIES OF PLATYCOPIA SARS (COPEPODA CALANOIDA)—Mildred Stratton Wilson—*Smithsonian Institution*, 16 p.,

illus., paper, 15 cents. Smithsonian Miscellaneous Collections, Vol. 106, No. 9.

THE STORY OF THE THERMOMETER—Benjamin De Leon—*Science Learning Aids Pub. Co.*, 32 p., tables and illus., paper, 35 cents. Lessons in Science Series for School and Home Study No. 1. A booklet suitable for the 9th grade science student, giving a picture of the kind of relationship that exists between the subject matter and those men who have developed it.

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RESOURCES

Rich Cattle Land Found in Colombia

► NATURE, assisted slightly by man in modern times, is creating in the interior of Colombia, S. A., a rich grassland comparable to the American great plains or the Argentine pampas, says Dr. R. A. Stirton, University of California paleontologist.

Dr. Stirton says that this area, called the llanos, Spanish for "great plain," covers more than half of Colombia, and is still expanding. The paleontologist has just returned from making a geological study of the eastern flank of the Andes along the edge of this great plain.

He says that evidently there is now under way a gradual geological uplifting of the llanos area; at the same time the inhabitants of the area are constantly burning off the grass on the plain, which also burns part of the bordering jungle. Dr. Stirton says these two factors help expand the plain.

The area awaits only transportation facilities, such as highways and railroads, for its development as a rich cattle range. Dr. Stirton reports the soil appears to be good, and, though the area is just north of the equator, the climate along the Andean foothills is excellent.

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Cotton's importance in American economy is indicated by the employment it provides; in 1939, about one-quarter of the total farm population of the United States grew cotton, and 500,000 persons worked in cotton textile making.