area of Asia and millions of square miles of Pacific waters.

Willy-nilly, the United States, by occupying Japan, must take over Japan's attitude about Korea. Perhaps one reason we decided to fight the Communists in Korea was that, after five years of responsibility for Japan, we have absorbed Japan's longheld preoccupation with Korea as the key to Asiatic dominance.

Japan and China have fought and intrigued over Korea since recorded history began. In 1592 the Korea Straits, over which our troops in Korea are now being supplied, was the scene of the first of several historic naval battles in waters near Korea. There, after 300,000 Japanese troops had invaded Korea in an attempt to drive out Chinese influence, science defeated the Japanese. A Korean admiral invented the iron-clad ship and used several of them to sever the Japanese supply route and finally to defeat completely the Japanese effort to control Korea.

Today those same straits, little more than 100 miles wide, are the reason for anxious worry on the part of our admirals. Russian submarines and aircraft, based at both Vladivostok and Port Arthur in Manchuria, threaten American supply routes to our beleaguered troops in Korea.

Russia, China and Japan intrigued in a Korea bedeviled by a corrupt, autocratic government until 1894. China put troops in Korea. Japan put more troops in Korea. The Sino-Japanese war which resulted was decided, not by land fighting, but by a naval battle off the mouth of the Yalu River, which divides North Korea from Manchuria. Japan won.

Russia, Germany and France, in a triple intervention, however, wrested the fruits of victory from Japan. This "upstart" eastern nation was upsetting the balances es-

tablished by the western nations in Asia and was threatening to become a world power. Japan was forced to withdraw.

In the next 10 years Japan did emerge as a world power. What happened in Korea became important around the world. Britain signed an alliance with Japan. Japan's power became important as a factor in the pre-World War I relations between the European nations.

In those ten years, the cockpit was Korea. In a series of maneuvers too complicated to report, Russia and Japan contended for supremacy in Korea and Manchuria. The maneuvering led to the Russo-Japanese war of 1904-05 and one of the most decisive naval battles of modern world history—right in the Korean Straits.

Japan won again. She took over Korea completely. This time no alliance of European powers could wrest victory and dominance of Korea and Manchuria from her. This time her victory affected European affairs. Russia was demonstrated to be a weak power—no longer a brake on German ambitions. Japan was a power whose favor was to be sought. As a direct result she was permitted to take the mandated Pacific islands which our troops had to wrest from her in World War II.

In 1934 the contest between Japan and Russia had another test—a test which neither power was able to bring to a final conclusion. There were "border clashes" along the Manchuria-Siberia boundary.

Now, Russia has control of Manchuria and all of China. She has a modern navy, nothing like the two inept fleets which were successively defeated by Japan early in this century. We have replaced Japan as a power in Asia. But the contest is the age-old one—who shall control Korea.

Science News Letter, August 12, 1950

PHYSICS

Warning of Radiation

A "dosimeter" will help citizens to recognize dangerous levels of radioactivity and also will aid them in finding the best way out of the dangerous area.

➤ ATOMIC scientists in Pasadena, Calif., have invented a radiation "dosimeter" simple and rugged enough to be used by any one in a radioactive disaster area, small enough to be worn like a wrist watch or carried like a package of cigarettes.

Drs. Charles C. Lauritsen and Thomas Lauritsen of the Kellogg Radiation Laboratory at California Institute of Technology describe the proposed civil defense safety device in the journal Science (Aug. 4).

Their instrument is not being made in quantity; it is only a proposal. But in the semi-annual report of the Atomic Energy Commission, released recently, there is

mention of an "electrostatic dosimeter" invented by a scientist at CIT and reference to "further industrial development" of it.

In the world of the A-bomb and H-bomb, write the Lauritsens, "tremendous and altogether unprecedented quantities of dangerously radioactive substances can now be liberated in a single explosion, or manufactured in a nuclear energy plant and delivered in the form of radioactive poisons, producing radiation hazards of fantastic magnitude."

Their invention would equip the ordinary citizen with a way of recognizing dangerous levels of radioactivity and a sort of

radiation compass to find the best way out of the area of dangerous radiation.

A wheel similar to the winding stem on a watch provides the electric charge which powers the instrument. The level of radiation would be shown by the speed at which a needle crosses a simple dial.

Radiation is invisible and unfeelable. You can get a bad dose of it, even a killing dose, without knowing you are exposed. In atomic laboratories and A-bomb plants, workers carry photographic films and pocket instruments. But these must be checked by specialists at the end of the day. Other radiation instruments are delicate, complicated and expensive.

"It is conceivable that our armed forces

"It is conceivable that our armed forces have already developed satisfactory instruments (for civilian defense teams, rescue crews, etc.)," the California scientists say.

"But, for reasons that are not clear, such information is not available to the public. We can only proceed on the assumption that no fully satisfactory instrument for this purpose has so far been developed."

In the AEC report, six types of simple safety instruments for civil defense are listed as under development. None are available yet in any quantity, an AEC spokesman said.

Science News Letter, August 12, 1950

ENTOMOLOGY

War on Insect Pests Now Nation-Wide

➤ AS many as 35 airplanes a day, every day, are roaring low over Wyoming's grasslands and mountain valleys in an all-out war against the grasshopper.

Desperate Southern cotton growers are using poison dusts to battle billions of boll weevils.

The armyworm has marched over Maryland, Delaware, New Jersey, Pennsylvania and Virginia, and is attacking in Ohio, Oklahoma, Texas and California.

Reports such as these from the Department of Agriculture document the Battle of 1950 against the annual insect infestation, now in full swing.

Latest reports on the most numerous insect pests list the grasshopper, European corn borer, corn earworm, armyworm, alfalfa weevil. red mites, Mexican bean beetle, potato leafhopper, seed-corn maggot, Colorado potato beetle, potato flea beetle, cutworm, tobacco hornworm, boll weevil, cotton leafworm, cotton thrip and the screwworm as causing moderate to heavy damage across the nation.

Harried insect fighters have one comforting thought. It could have been much worse. Spring this year was cold and wet in many areas. Tremendous numbers of insect eggs which survived the warm winter were delayed and often reduced in numbers in hatching.

Science News Letter, August 12, 1950