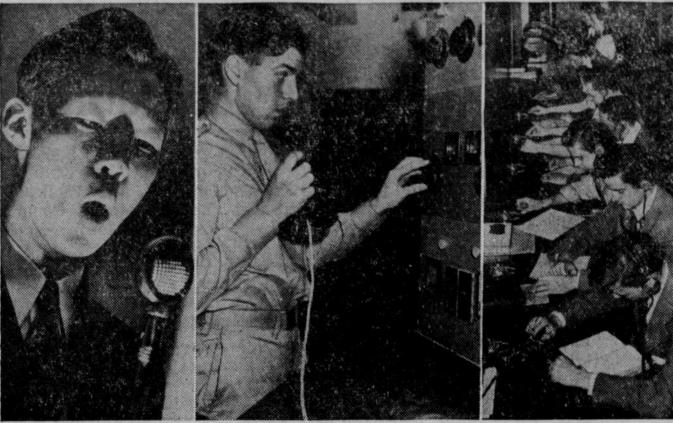
'Get the Message Through' Is Job of Signal Corps



In this war, instructions and reports, not only from plane to base but from ship to shore and field commander to officers, are sent by wireless. These pictures show some of the phases of signal corps training. At left, Moon Young, Chinese student, tries to perfect his diction so he can become a member of the signal corps and get out to the Southwest Pacific. He has a score to settle with the Japs. Center: Type of equipment used by planes to keep in touch with home bases and other planes during "dog fights." Right: Skilled fingers beat out messages on semi-automatic telegraph keys.

Captor and Captives in British 8th Army Push





One of the first trains to get to Cairo, Egypt, from the Alamein front after the British Eighth army started its victorious drive is shown at left. The train was jammed to the doors with thousands of Axis soldiers taken in the early stages of the fighting. At right, Lieut. Gen. George Montgomery, head of the Eighth army, poses for his picture right at the front. The general leans on a tank and smiles for a photographer, as if he were in some London studio. Shells are bursting less than a half mile away.

Aids of Saboteur Get Death Sentence



"This looks like payday," said Hans Max Haupt (front right) shortly after he heard the death sentence pronounced on him and two other German-Americans who had given aid to his executed saboteur son, in Chicago. Behind Haupt is Walter Froehling, and behind Froehling is Otto Wergin, both condemned to death. The wives of the three convicted men were sentenced to 25 years in prison, and fined \$10,000 each.

Fathers and Sons Inducted Into Army



A pair of fathers and their sons were inducted into the army the other day, in New York. Photo shows, left to right, George Spencer Goodacre, 43, and his son, George, 21; Edward Dondero, 21, and his father, Robert Dondero, 41, as they handed their clothes to Pvt. Nathan Rubin, prior to examinations for army service.

Paved Way in Africa



Tall man in center is one whom the writers of the history of the U. S. coup in North Africa will particularly mention. He is Robert Murphy, head of our consular force in France and its African colonies. Murphy prepared the groundwork for our occupation of North Africa. He is shown during a visit to Dakar being welcomed by M. Chapoulie, the colonial governor (in whites).

'Priority' Dolls



With our second wartime Christmas approaching, American toy manufacturers are faced with priorities. Instead of dolls being made of rubber they are now made of wood pulp. Here an aid to Santa paints faces on the new kind of doll.

Removing Victims of Night Club Fire



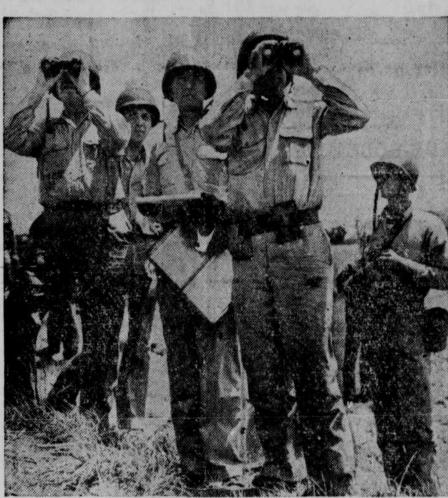
Fire and rescue workers enter the smoldering ruins of the Cocoanut Grove night club in Boston to remove bodies of the dead and injured. This fire, the nation's worst since the Iroquois theater fire in Chicago in 1903, took a toll af about 500 lives. The fire was caused by a 16-year-old bus boy who lit a match so he could see to replace a ceiling light bulb. The match started an artificial palm tree burning.

Always Being Bossed by Corporals



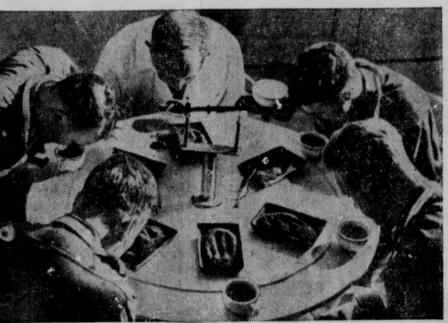
Members of the German armistice commission in French Morocco, captured by U. S. forces who landed there during the North African operations, are shown being marched off for internment by an American corporal. Taking orders from a corporal is nothing new for them. That was Der Fuehrer's rank in the German army.

Marine Chiefs Visit Guadalcanal Island



Lieut. Gen. Thomas Holcomb (left), marine corps commandant, squints through field glasses at Guadalcanal field positions during his recent air trip to the Solomon Islands. Maj. Gen. R. J. Mitchell, marine aviation chief, who accompanied General Holcomb, and Maj. Gen. Alexander A. Vandergrift (right), commander of the ground forces in the Solomons, also trains his field glasses on a distant object.

Army Coffee Rationing Helps Civilians



More than a year ago the army quartermaster corps took steps to ration coffee. As the table top rotates, the army officers sniff and taste each sample of coffee, at the quartermaster depot, in Chicago, where 48,000 pounds of coffee is roasted daily.

Sinks French Fleet



The scuttling of the French fleet at Toulon, when the Germans stormed that great French naval base, was ordered by Admiral Jean de la Borde (above), commander-in-chief of the fleet. Sixty-three vessels, including three battleships, were in the harbor at the time, and 61 of these were believed lost. Thus were the Nazis deprived of the fleet on which Hitler had banked so heavily.

New Head of 'Spars'



Photo shows Lieut. Com. Dorothy C. Stratton, new head of the "Spars," the new women's auxiliary reserve of the U. S. coast guard, seated at her desk in Washington. She wears the two and a half stripes of a lieutenant commander, on her union coat sleeve, and the U. S. coast guard insignia on her coat.—Soundphoto.

Testing Tank Crews



There are two big rooms in the medical research laboratory at Fort Knox, Ky. One is kept at 120 degrees above zero; the other at 30 below. Tank crews eat, sleep and work on their tanks while doctors take notes. Here a sergeant climbs up and down a ladder toting a full pack while army medics measure his reactions so crews will be better cared for in tropical climes.

'Good Neighbors'



Dr. Carlos Arroyo Del Rio (left), president of Ecuador, shown with Gen. Manuel Camacho, president of Mexico, when Dr. Del Rio arrived in the Mexican capital while en route to the United States. Later he visited President Roosevelt at the White House.

Farm Jopies

Livestock, Poultry Feeds Need Proteins

Best Closely Resemble
Type in Animal Tissue

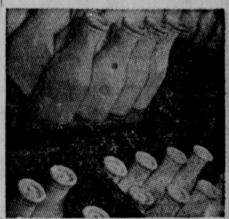
Livestock and poultry feeds must contain proteins, but there are great differences in proteins from animal and vegetable sources. The best proteins for feeds are those which most closely resemble the proteins in animal tissue.

in animal tissue.

The essential factors in protein feeds are amino acids, and 22 of these acids have been isolated and identified from natural feeds. It is believed that at least 10 of these 22 amino acids must be available in a ration for the proper nutrition of livestock or poultry.

Some feed stuffs lack so many of the essential 10 amino acids that those feeds must be supplemented by others to supply missing acids. Deficient proteins have to be changed over in the digestive processes before they can be used, so a pound of protein which contains most of the essential acids is worth more money than a pound of protein that is partially wasted in being changed to an available form.

Animal proteins, such as are present in tankage and in fish meal, are



Milk is still one of the very important foods needed in everyone's diet. Here it is leaving the bottling room of a Dushore, Pa., dairy on its way to hard-working wworkers.

better for livestock and poultry feeing than are vegetable proteins dorived from grains or seeds.

Protein from properly processed soybean oil meal appears to stand at the head of the list of vegetable proteins, but the nutrition specialists say it is best to use two or three different vegetable proteins so that one supplements the other in furnishing amino acids. Peanut meal and corn gluten meal lack too many amino acids to be used as substitutes for animal proteins.

Cattle and other ruminants can be properly fed with less complete proteins than can either swine or poultry. Swine on good pasture can be fed on vegetable proteins only, but animal proteins should be in the ration for swine in dry lots.

Agriculture

Industry
By FLORENCE C. WEED

Apples

New non-food uses are being sought by apple men so that a market can be kept for all the apples raised in this country. From pulp and peel comes pectin, that gelatinous substance which makes jelly. When extracted from apples and bottled in liquid form, it is sold to housewives to be added to other fruit juices to make them "jell."

Scientists also are trying to find a method to produce apple juice that will not cloud on standing.

Studies are being made to find ways to recover wax from apple skins to use in stencil sheets and water proof coatings. Apple seed oils also are being investigated. Cider is always a staple crop.

New industrial uses for apples are expected to develop as soon as improved methods can be discovered for drying pomace and waste products. This would permit indefinite storage and remove valuable material from being a nuisance.

Although there are only half as many apple trees in the country as 30 years ago, the apple crop has declined only 8 per cent because poor trees have been removed and good trees made to produce more fruit.

Agricultural Notes

Ohio agricultural agents have a supply of leaflets describing how to build outdoor storages for fruits and vegetables.

Price ceilings on scrap metals set by OPA will not be raised, according to OPA officials. There will be no profit in hoarding—only a loss of self respect by anyone gambling for personal gain at the expense of the common effort to win the war.