

# Airplane Patrol for Forest Fires

Federal Forest Service Is Making Experiments With Army Machines.

## FORESTER TELLS ABOUT TRIP

Gives Interesting Account of Experiences Together with Observations as to Feasibility of This Method of Fire Detection.

Washington, D. C.—Airplane fire patrol of the national forests by army machines was begun as an experiment for the forest service recently. The first report from a forester has just come to headquarters here after an exciting observation flight from Mather Field made over the southern patrol route in California, covering portions of the Eldorado and Stanislaus forest preserves.

The trip was taken by Assistant District Forester How for the collection of data as to the feasibility of this novel method of fire detection; what should be done to fight the flames, if possible from the plane; how alarms may promptly be given; what style of plane or balloon is best adapted, and what additional apparatus may be necessary to make successful this attempt at more effectually safeguarding remote and inaccessible stretches of practically unexplored country from the scourge which annually destroys thousands upon thousands of acres of timber rapidly becoming well nigh priceless.

Tells Stirring Tale. Forester How not only covers all these interesting points, but tells a stirring tale of adventure in doing so. After describing his preparations for the trip, he continues:

"My pilot was Sergeant McKee, who is one of the army flying instructors. The plane we used was a Curtiss JM-1 with an OX-5 motor. There are no controls in front, so all I had to do was to sit strapped to my seat. We started about nine o'clock. I had heard so much of persons becoming nauseated that I was expecting to feel funny, but I never had that kind of a symptom. My impression was that we were standing still, when in fact we were going 70 miles an hour. We flew up the American valley to Placerville; thence to Chinese, ten miles southeast of Sonora.

"On the trip we saw five fires, all of which were outside of the forest boundaries. The largest was near Placerville and had been burning a week.

"The country is so rugged that a landing could not have been made to fight a fire without a crash. The pilot agreed to this and steered to the west of the peak instead of to the east, and

by doing this, we missed seeing some of the country the patrol is expected to cover. A forest patrol by aircraft is more hazardous than the flying that is usually done.

"My pilot made me understand that our trip scared him more than any other trip he had ever made, simply because he could not make his plane attain the elevation necessary for relative safety. He said he would take no more passengers in the future. To do so would mean that he could cover only portions of the forest which could be seen from the lookout points.

Getaway Extremely Difficult.

"In landing at Chinese for luncheon we broke our tail skid, but were able to replace it. Our getaway was extremely difficult, and I did a heap of thinking. Returning, we made a direct flight to Mather Field at an elevation of 6,000 feet. When about half way the pilot said he was going to make a straight dip. He had made a series in the morning of 50 to 70 feet on an angle. This time he shot down for 500 feet.

"This was quite thrilling, but nothing to the tail spin he put the machine through in descending to Mather Field. I had no warning and felt as if we were going down a series of corkscrew curves at a terrific rate. The earth looked like an ocean during a heavy sea. We dropped 1,500 feet in this manner and then gracefully rolled to the field within a hundred feet of the hangar. Our total flight time was about four hours and the distance covered 250 miles.

"Fires have already been detected from airplanes that have not been picked up by the lookout men. There is no question in my mind that it is the most feasible method of prompt fire detection. I believe, however, that the expense of establishing such a patrol would be prohibitive for the forest service.

"I am convinced more than ever that the dirigible with helium gas will be the type of ship we shall use in the future. I predict that within five years our present system of lookout patrol will practically be a thing of the past and also that the suppression of forest fires will commence immediately after discovery. In other words, the fire fighting forces will accompany the observer in a dirigible. When a fire is discovered one or two men will climb down and put it out. There will then be different methods of fire suppression than we now use. It will be possible to carry large tanks of water and motors to pump it on a fire. Chemicals, perhaps, may also be used."

# CONTROL 16,000 MILES OF PHONES

United States Army Perfects Fine Telephone System in Occupied Territory.

## HANDLE 15,000 CALLS DAILY

Enables Commanding General to Keep Hand on Pulse of Army—Operators Speak English, French and German.

Coblentz.—At the time the Americans began withdrawing from Germany the United States army had perfected one of the finest telephone systems in Europe. From the headquarters of the third army in Coblentz fifty long-distance lines had been set up and it is possible for the commanding general to sit in his office and talk with American officers in London, Berlin, Vienna, Rotterdam, Brussels, Antwerp, Paris and various other European points.

The army of occupation has a telephone system closely resembling the best commercial system in the United States. On the top floor of the headquarters building in Coblentz a nine-position switchboard was installed soon after the Americans reached the

Rhine. Scattered throughout Coblentz are twenty private branch exchanges of the various units of headquarters. Connected to this system are more than four hundred "subscribers" in addition to the fifty long-distance lines.

16,000 Miles of Wire. Within the German occupied area there has been established by the signal corps under the direction of Col. Parker Hitt, chief signal officer, a network of wires connecting the various units of the third army. Direct lines connect with all the corps and divisions, approximately 16,000 miles of wire being in service.

This extensive plant has not, however, been built by the third army, but consists almost altogether of the German lines taken over by the signal corps and so arranged as to meet the needs of the army. Sufficient circuits were left, however, for the civilian population to carry on their business.

More than 15,000 calls are registered daily on the Coblentz switchboard. With the establishment of an exchange in Coblentz it was necessary to employ operators who could speak English, French and German. The fifteen operators on duty in Coblentz are all members of the women's telephone corps and have been in the service more than a year. The chief operator, Miss Helen Cook, was a former employee of the American Telephone and Telegraph company of New York. Previous to joining the American expeditionary force, Miss Cook spent six years as instructor for the Bell system in offices in Chicago, Minneapolis, Omaha, Cleveland, Detroit and Memphis.

"Doodlebug" Code Name. The word "Doodlebug" is the code name of the third army switchboard in Coblentz, the corps and divisions also retaining the code names that were assigned them during the war. On the back of a twenty-page telephone directory issued by the third army the artist's conception of a "doodlebug" has been reproduced in the shape of a bug made up of a combination of sabres, rifles and an aerial bomb.

All the apparatus, including switchboards, telephone instruments, and, in fact, everything excepting the wires, is of American manufacture and is to be taken out when the Americans in force say good-bye to the Rhine and start for France and home.

Gas Woodchucks. Winsted, Conn.—Gassing woodchucks is the latest method of exterminating them in Massachusetts. The idea was tried out on the farm of Eibert L. Fargo, near Marlboro, and proved a success.

A hose was attached to the exhaust of an automobile engine and extended down the hole. By use of a liberal mixture of gas the rodents were killed.

# DAIRY TALK DAIRY

## MILK AND CREAM DEFINITION

Standards to Be Used for Enforcement of Food and Drugs Act Published in Circular.

(Prepared by the United States Department of Agriculture.)

Definitions and standards for milk and cream adopted by the joint committee on definitions and standards and approved by both the Association of American Dairy, Food and Drug Officials and the Association of Official Agricultural Chemists, to be used as a guide for the enforcement of the food and drugs act, have been published by the United States department of agriculture in a circular, "Food Inspection Decision 178."

Milk is defined as the whole, fresh, clean, lactal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept, excluding that obtained within 15 days before and five after calving, or such longer period as may be necessary to render the milk practically colostrum free.

Pasteurized milk is milk that has been subjected to a temperature not lower than 145 degrees Fahrenheit for not less than 30 minutes. Unless it is bottled hot, it is promptly cooled to 50 degrees Fahrenheit or lower.

Skimmed milk is milk from which substantially all of the milk fat has been removed.

Buttermilk is the product that remains when fat is removed from milk or cream, sweet or sour, in the process of churning.

Cream, sweet cream, is that portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force. It is fresh and clean. It contains not less than 18 per cent of milk fat and not more than 2-10 per cent of acid-reacting substances calculated in terms of lactic acid.

Whipping cream is cream which contains not less than 30 per cent of milk fat.

Homogenized milk or homogenized cream is milk or cream that has been mechanically treated in such a manner as to alter its physical properties with particular reference to the condition and appearance of the fat globules.

The composition of the milk produced by different breeds of dairy cows varies so greatly, say the food officials, that it is not practicable to fix a standard which is applicable in all localities in the United States and its territories. It is therefore, left to the state and municipal authorities to adopt such standards as their local production conditions may warrant.

## COW TESTING IS PROFITABLE

Tennessee Dairymen Expresses Appreciation of Benefits of Cow-Testing Association.

(Prepared by the United States Department of Agriculture.)

"I would not take four times what my testing work has cost me for what it has been worth to me," is the way a Tennessee dairymen expresses his appreciation of the benefits he gained as a member of a cow-testing association which was organized by the United States department of agriculture in his community. "The cow which has proved to be the best one in my herd was the one that I considered poorest



A Good Start for a Cow-Testing Association.

before the tests were made. I priced one of my cows at \$125 before she was tested, but now I price her at \$350."

The test showed that the nineteen-year-old cow which this dairymen had used for the foundation cow of his herd made 68 pounds of butterfat in November. The average production for the herd during this month was over 40 pounds of butterfat.

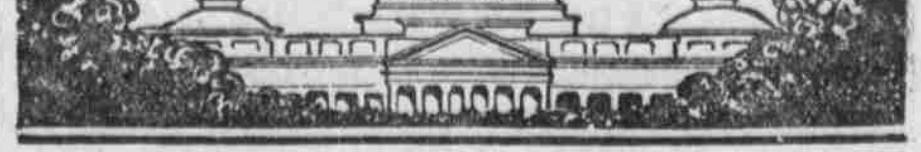
## CONVENIENT ROOM FOR MILK

Separate Apartment Should Be Provided to Relieve Oftentimes Overcrowded Kitchen.

(Prepared by the United States Department of Agriculture.)

Where even a few cows are kept, a separate room for handling milk should be provided to relieve the oftentimes overcrowded kitchen. Well houses frequently have a room which, with the addition of a concrete floor, shelves, and windows, makes a very convenient milk room.

# WASHINGTON CITY SIDELIGHTS



## World Celebrities Coming to Visit Uncle Sam

WASHINGTON.—More world celebrities will visit the United States during the coming twelve months than in all its previous history. Dr. Epitacio Pessoa, president of Brazil, who arrived in Washington recently, is the first of the long line of statesmen and royal personages whom the United States is soon to entertain.

The prince of Wales is to visit this country in August. He will be entertained at Newport, and later will come to Washington to be officially entertained by the president.

King Albert and Queen Elizabeth of Belgium and Queen Marie of Roumania, possibly President Poincaré of France and probably many other members of royalty will come later. General Petain has already expressed his intention of visiting the United States, and an invitation to do so will be extended to Marshal Foch.

The first session of the League of Nations is to be held in Washington in October and will bring to the capital Premiers Lloyd George, Clemenceau and practically all of the distinguished statesmen who have taken part in the peace negotiations in Paris.

Visits of royal personages and distinguished European statesmen to the United States in the past were few and far between. In the future they promise to be frequent. The great of the world have conceived a new idea of the importance of the United States since the world war.

Moreover, since it is diplomatic courtesy to repay the visit of a chief of state, the rulers of the countries visited by President Wilson will feel obligated to visit the United States, even if they should not be prompted to do so by personal interest.

## Navy Dress Uniform Knocked Into a Cocked Hat

SECRETARY DANIELS has issued an order cutting down the wardrobes of naval officers to a minimum. Gone are the special full-dress outfits which ate up a large portion of the officers' pay. Cocked hats, epaulets and full-dress belts also are forbidden. The order reads:

"As a result of the lessons learned during the war, during which officers of the navy were only required to wear the ordinary service uniform, as the result of which this uniform was found to meet the requirements for both formal and informal occasions, to effect economy and space on shipboard and facilitate ease in traveling from one station to another, a general order has been issued abolishing as part of the naval officer's equipment the following articles of clothing: Special full-dress coat; mess jacket; full-dress trousers; mess trousers; a cocked hat; epaulets and full-dress belts.

"The following prescribed uniforms are abolished by the order: Special full dress; white special full dress; full dress; white full dress; dress; evening full dress; dinner dress and mess dress.

"The action will result in a great saving to the officers of the service in the future, as they are required to purchase all articles of uniforms at their own expense. The only uniforms now authorized to be worn are: Undress, service dress, white service dress, and evening dress, but only the service dress can be worn until the president's proclamation that the war has closed. Epaulets will not be worn with evening dress hereafter."

The cocked hat of ancient and honorable memory is now relegated to the museum. It never will be missed. Every midshipman graduated last month from Annapolis is in pocket about \$500 as the result of this order.



## Ideas of Living Expenses Seem to Vary Widely

AUTHORITIES of the United States government have decided that a young woman, to live respectably in the District of Columbia, must have \$15 a week. Different states, establishing a minimum wage, have decided as a rule that \$15 a week is about enough to keep an American girl sufficiently well fed, dressed and housed.

Yet in New York Miss Lorena Carroll, nineteen, has petitioned the surrogate's court to increase her annual allowance from \$15,000 to \$20,000. She says the increased cost of living makes it impossible for her to keep up her social position on the \$15,000. Miss Carroll is the only daughter of Joseph D. Carroll, millionaire horseman. Her father willed her the income from \$150,000 until she is twenty-one and then the residue of his estate, amounting to \$1,250,000. Miss Carroll lives with her mother and attends the Ogontz school of Philadelphia.

In June, 1916, Surrogate Fowler permitted her mother to spend \$12,500 a year on the daughter, instead of \$7,500. Since that time her allowance has been increased to \$15,000. A schedule of Miss Carroll's expenses shows:

Rent, \$2,000; clothing, including sport coats, evening dresses, auto coats, jewelry, furs, toilet articles, manicuring, shampooing, \$3,000; household expenses, \$4,000; insurance, \$850; automobile operation, \$5,000; education and church, \$2,000; summer cottage, railroad fares, hotel bills, dances and amusement parties, \$3,000; physicians, opticians, dentists, drugs and medicines, \$1,000. Total, \$20,850.

Dr. Royal Meeker, commissioner of labor statistics, investigated 348 families in Chicago in the winter of 1918-19. Their incomes ranged from under \$900 a year to more than \$2,500 a year.

Sixty-four per cent of these families save something; 28.2 per cent showed a deficit, and 6.9 per cent broke even.

## Demand for Captured Hun Cannon Exceeds Supply

DISTRIBUTION of the German cannon, machine guns and other war devices captured by Americans in the world war is provided for by the Wadsworth resolution passed by the senate, which neatly transfers to the states the difficult problem presented by the fact that the requests for trophies so far received from several thousand cities, towns, villages, counties, parks, schools, organizations, etc., are considerably in excess of the supply.

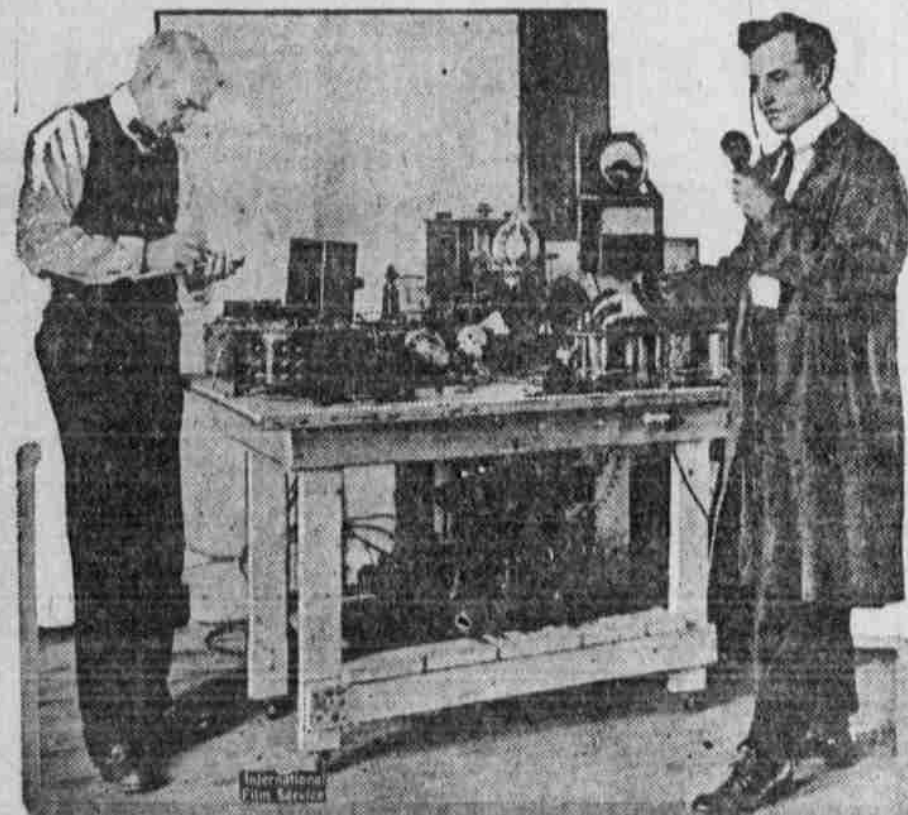
Under Senator Wadsworth's plan the secretary of war will apportion to the states and territories and the District of Columbia in the same proportion as that borne by the number of men serving from each state to the total armed force of the United States "all cannon, gun carriages, machine guns, minenwerfers, mortars, bomb throwers, flame throwers, gas projectors and other war devices captured from the armed forces of Germany and allied nations," with the exception of those required for experimental purposes or actual use by the United States and for national museums, cemeteries and parks.

The apportionment and distribution to towns and cities that have preferred requests will be made by the governor of each state.

Transportation charges to the point of delivery will be borne by the federal government, \$1,000,000 being made available under the resolution for the purpose, but not the costs incident to erection of the trophies in the various communities.



## DE FOREST, THE WIRELESS WIZARD



Dr. Lee De Forest (at left), the "wireless wizard," whose invention of the audion made possible the transmission of speech by wire and wireless over long distances as used today. The photograph was made at Dr. De Forest's laboratory at High Bridge, New York city.

## Marine Rookies Shocked by Customs of Cubans.

Guantanamo, Cuba.—Some newly arrived marines at this place are getting their first insight into Cuban customs.

It is not uncommon to see naked children in the towns about here playing in the streets.

Another novel sight is the municipal graveyard. Cubans have to pay taxes on the graves of their relatives, and when the taxpayer becomes delinquent the body or bones are exhumed and thrown in a common heap in one corner of the burying ground. The marines are rapidly acquiring the notion that Cubans are fresh air fiends.

Switzerland is considering the adoption of the 24-hour clock, abolishing the a. m. and p. m.

## HEROIC WAR PIGEONS

Flock That Did Wonderful Deeds Returns Home.

"General Muir" Comes With Breast Shattered as Result of Many Exploits.

New York.—With breast shattered, but still alive, General Muir, one of the greatest war heroes, returned recently. As the steamer pulled into New York harbor, General Muir sat on the deck wrapped in a blanket that bore several wound and service stripes. There was no perceptible sign that he realized where he was. He made no comment.

Reporters tried in vain to interview him. Sergt. Fred J. Hermann, his commander, did all the talking. You see—General Muir is a carrier pigeon. He was one of the seven birds of the intelligence service of the A. E.

F. that the transport brought home. General Muir's exploits are many. On one occasion, having been assigned to deliver a message of great importance to a post 18 miles away, he flew through strappnel and gas, and past a squadron of Germans that had been sent out to intercept carrier pigeons and delivered the message in just 33 minutes.

With his breast torn open, with his wings singed by fire, and eyes blinded with blood, he kept on till he had reached his objective.

King Cole, another pigeon, is the nearest rival of General Muir for fame. He was a messenger in the last Argonne drive and flying through a cloud of gas fell into an abandoned trench. There he lay in the mud for two days, and gathering strength, arose, and came home with the message.

A patent has been granted for an electrically illuminated keyhole.