

# RESORTS IN SUMMER DRESS READY FOR OPENING

## Centers Near Ogden Can Be Reached by Automobile or Trolley; Improvements and New Devices Add to Attractiveness

With the general spirit of the people on the edge of winter and the older ones will enjoy the picnic booths, refreshment stands and various other attractions of the park. The place is in tip-top condition and every effort will be made by the management to furnish amusement of the highest order.

**SPRINGS PREPARED**

At the Utah Hot Springs the management has made elaborate preparations to take care of the crowds that always attend the festivities of the popular resort. At the springs will be found splendid mineral water bathing facilities in the open air pools as well as in the indoor plunges, sand beaches attract the pleasure seeker, refreshment stands are filled with palatable refreshments and the dancing pavilion lends enchantment to the surroundings. Electric cars will run to the springs at frequent intervals during the day and the open road for motor travel offers a charm to the auto fan.

Lagoon is open for the season, offering even better facilities for the pleasure seekers than in former years. New features have been added to the resort and it is very certain that a day of recreation may be well spent there.

# British Ready for Wireless Sets in Homes

**LONDON, May 27.**—Government sanction is all that is needed to make radio a national public utility in England.

News of this development follows reports from America that a national system of broadcasting with rental of radiophone receiving sets in homes, was being planned there. That England is actually preparing for such radio service in the near future is gleaned from a statement issued by Godfrey Isaacs, managing director of Marconi's Wireless Telegraph company.

In this statement, Isaacs looks forward to the time when radio will be as popular as the telephone and outlines a program for an organized public service which the Marconi company is ready to install as soon as the necessary authority is obtained.

**IN ALL HOMES.**

"My hope is that in time every home will have a wireless set," says Isaacs. "Our program is more particularly to supply the instruments to the householder on hire."

"Our idea is to have two or three broadcasting stations in different parts of the country and to have a program for different hours of the day. We shall transmit by particular wave lengths—if we get assistance, as I have no doubt we shall, from the authorities—which will be so confined as to reach only these particular receivers. Nobody else will be disturbed and the telephonic receiver will not be disturbed either by wireless telephonic or telegraphic communication."

This, says Isaacs, will be the start of a system which will spread through the continent of Europe and eventually will reach over the entire world.

**GREAT POSSIBILITIES.**

"I do not think that anybody realizes how big a thing this is going to be," he adds. "A message sent out by the government or the police would be in every home in the country in a second."

"We have been perfecting this system for a long time. We have been working in close touch and co-operation with the big American, German and French firms."

Even though you know the wireless code, you may be puzzled by some of the signals being flashed from one station to another.

These signals, or letter combinations, form a separate call code and should be learned as thoroughly as the dot and dash system. They help to shorten messages between stations.

Each signal it will be noticed, begins with a Q. That is the introductory or warning letter for the actual message in the rest of the combination. A question mark after each combination changes its declaratory meaning to the corresponding question.

The abbreviations, or "calls" that are used most frequently among licensed amateurs and professional operators, follow:

QRA—This is station  
QRB—My wave length is  
QRC—I am receiving well  
QRD—I am receiving badly. Please send 20 — for adjustment  
QRE—I am being interfered with  
QRN—Atmospheres are very strong  
QRO—Increase power  
QRP—Decrease power  
QRS—Send faster  
QRT—Stop sending

# Displaying the Flag

Rules as Given by the American Legion Weekly

**IN BRIEF**

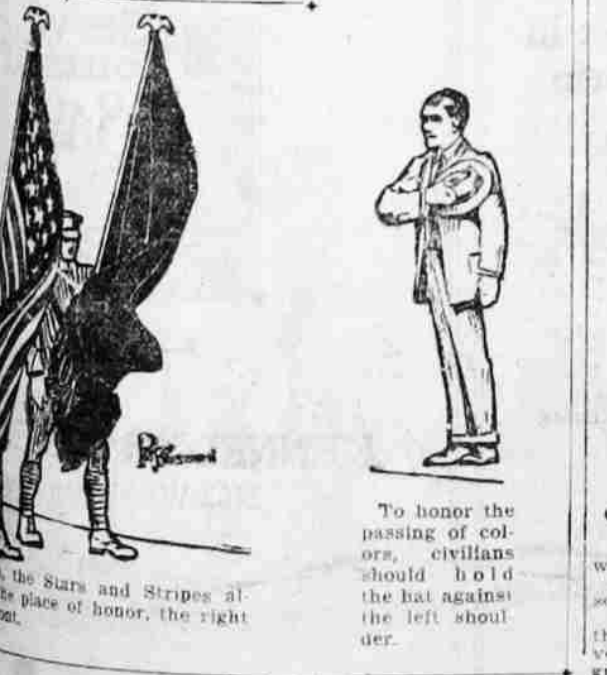
Remember the Stars and Stripes always claims the place of honor, the forefront, the right, or the highest elevation. The colors should never touch the ground or the deck of a boat.

In the horizontal position, the stary field should be at upper left.

**DON'T—**

- use the flag as a handkerchief
- sew the flag onto a sofa pillow
- twist the flag into fantastic shapes
- use the flag in advertising
- let the flag touch the ground

Vertically, the field should be at upper right.



# Radio-graphs

## VACUUM TUBE SET BEST FOR GENERAL USE

### This Equipment Used for All-around Efficiency by Amateur

**By R. L. DUNCAN, Director, Radio Institute of America**

In erecting or assembling an amateur wireless transmitting station, it is suggested that the vacuum tube be used for all-around efficiency.

All the records made by amateurs in the recent trans-Atlantic test were from stations using the tube.

A tube transmitter will cover three times the distance of the old type spark set of the same power.

For sending out all lengths of undamped waves the arc method, the Alexanderson alternator and the oscillating vacuum tube are used. But the only practical form of undamped wave generator for the short amateur length is the oscillating vacuum tube.

This method of transmission also permits the use of a combined radio telephone and telegraph set. By simply throwing a few switches, the operator may change from speech to telegraph code.

**WAVE TYPES**

There are three general types of wave which may be sent out by the tube transmitter: Continuous wave (C. W.), interrupted continuous wave (I. C. W.), and telephonic.

C. W. can only be received by stations using a vacuum tube receiving apparatus.

Since there are a large number of amateur using crystal receiving sets, the antenna oscillations of a tube transmitter are modulated by a "grid chopper" which is a rotary interrupter designed to interrupt the grid circuit of an oscillating tube approximately 1000 times a second. This converts the output oscillations into a current with the same receptive efficiency as a quenched spark set, termed I. C. W., and may be received on either a vacuum tube or crystal receiver.

Voice signals are received on either

**CURRENT SUPPLY**

In a vacuum tube transmitting set a low voltage source is used to heat the filament. When possible this voltage should be of alternating current, for that tends to prolong the life of the filament.

A high voltage is used to energize the plate circuit. The current for the plate may be obtained in three ways:

1. From a high-voltage direct-current generator.
2. From a rectified alternating current.
3. From an alternating current source applied directly to the plate and known as the self-rectification circuit.

# COUNTERPOISE ALLOWS SHARPER TUNING OF SET

### This Arrangement Used in Place of Ground for Wireless

**By R. L. DUNCAN, Director, Radio Institute of America**

The counterpoise or artificial ground is a useful addition to a radio receiving station and is simple in its construction.

Don't try to use it with a crystal receiver unless near the transmitting station.

But with a vacuum tube detector and amplifying set, the counterpoise lends sharpness in tuning and greatly eliminates interference, although it cuts down the strength of the incoming signals a little.

In using a counterpoise, no ground connection is made to the receiving set—the counterpoise antenna taking its place.

On aircraft and in places where the ground has poor conductivity, this counterpoise antenna must be used. This is merely another antenna supported above the earth and insulated from it. The station apparatus is connected to the regular antenna and earth.

**USE ON AIRPLANES**

On an airplane the counterpoise is furnished by the metal wires of the framework, the engine, and metalized wings. The antenna consists of a long wire which trails behind the plane when in flight often below the counterpoise. But the action is not different from the ordinary antenna and counterpoise systems.

Where an outdoor antenna is used in the country, the counterpoise should best be located directly under the aerial. It should be strung on small wooden posts arranged so that the wire does not touch the ground.

The wire should be of the same kind as that used in the aerial.

**EACH CASE INDIVIDUAL.**

To determine the amount of wire and length of the counterpoise, each operator will have to experiment with his own problem, inasmuch as it all depends upon the size, length and number of wires in the aerial.

Be sure to keep the lead-in wire from the aerial and the counterpoise well apart to do away with losses caused by induction.

In the city where the aerial is placed on top of an apartment house, it will probably be impossible to erect a counterpoise.

If at all possible, however, every transmitting station should use this counterpoise, for it increases radiation and transmitting distance.

# SHORT CUTS IN RADIO CALLS PRESENTED

### Signals Flashed From Station to Station Made Clear

Even though you know the wireless code, you may be puzzled by some of the signals being flashed from one station to another.

These signals, or letter combinations, form a separate call code and should be learned as thoroughly as the dot and dash system. They help to shorten messages between stations.

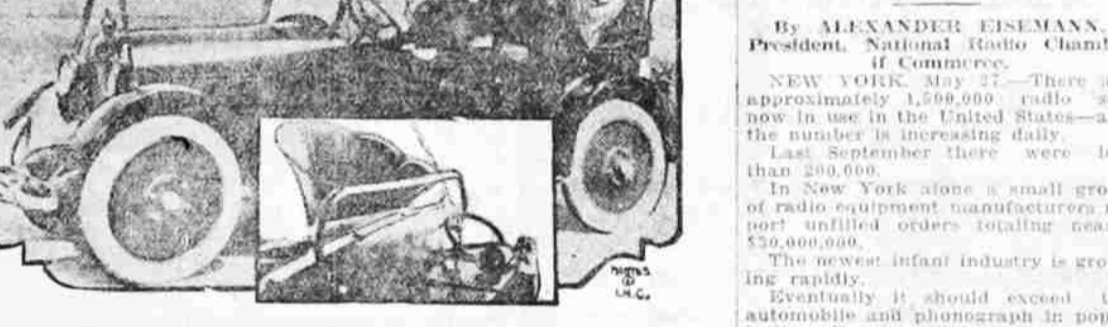
Each signal it will be noticed, begins with a Q. That is the introductory or warning letter for the actual message in the rest of the combination. A question mark after each combination changes its declaratory meaning to the corresponding question.

The abbreviations, or "calls" that are used most frequently among licensed amateurs and professional operators, follow:

QRA—This is station  
QRB—My wave length is  
QRC—I am receiving well  
QRD—I am receiving badly. Please send 20 — for adjustment  
QRE—I am being interfered with  
QRN—Atmospheres are very strong  
QRO—Increase power  
QRP—Decrease power  
QRS—Send faster  
QRT—Stop sending

# MOTORISTS MAY TAKE RADIO WITH THEM ON LONG TRIPS

### TOURING CAR EQUIPPED WITH RADIO RECEIVING SET



Motorists who go on summer touring trips may take the pleasures of the city with them—by radio.

Radio, with its power to travel everywhere, will make it possible for concerts broadcast from the largest cities to be heard in the open country.

While the motorist is driving along the highway he can "tune in" and listen to the program sent out from the city.

Fishing trips will not be without their radio parties, and camping grounds for motor tourists will be popular centers for such entertainments.

All that is needed is an aerial along the top of the automobile and a receiving set behind the front seat. While the car is moving the same radio program can be heard without the necessity of changing the instruments as the automobile advances.

Radio also is going to help motorists along the right roads to their destinations. An instrument has already been invented by which no driver using it could lose his way.

The instrument, placed on the radiator cap, with wires leading to the dashboard is designed to catch signals transmitted through telegraph wires along the road. Each road would have its own code signal. Reference to a code book would tell the driver where he is.

Even detours are provided for in this system. Motorists are warned of such turns before they reach these points.

Adoption of this system depends on action of the various localities. The instrument has already been tried out and found practicable. But it needs the co-operation of state authorities who may line the roads with the wires needed to carry the signals.

# RADIO IS HOUSE TOY FOR BOTH MOTHER AND BABE

Radio has brought about one less worry for mother.

She needn't rack her brains to find something new to interest the baby.

Instead, radio concerts caught by the receiving set at home supply a diversified program for the family. The grown-ups find the set as much a toy as baby does.

In the home of James M. Curley, Mayor of Boston, is one of these sets. Since it has been installed, Mayor Curley finds he has had no more requests for new toys from his little son. Radio is the reason.

Even Mrs. Curley likes to operate

# BROADCAST THIS!



**PAUL F. GODLEY**  
America's Foremost Radio Authority and Crowned King of American Radio Amateurs

# BECOMES STANDARD-EXAMINER RADIO EDITOR

Godley will write for readers of Standard-Examiner daily articles telling in simple language all about radio, helping the amateurs get more fun out of their equipment, interpreting the rapid scientific developments, making this marvelous, mysterious thing understandable to everyone.

**READ GODLEY'S ARTICLE BEGINNING MONDAY**

# Hear Prof. Terman

In his series of lectures at the

## 1922 U. A. C. Summer School

Professor Lewis M. Terman of Stanford University, one of the greatest authorities on education in the world today, will deliver a series of fifteen lectures at the 1922 Summer School of the Utah Agricultural College.

Professor Terman is known to every teacher in Utah through his book, "The Hygiene of the School Child." His presence at the Utah Agricultural College will make the coming summer session the greatest ever held at the Institution.

# Subjects Of Lectures

- Mental Tests and How They Work (4 lectures);
  - The Gifted Child (4 lectures);
  - The School Laggard (1 lecture);
  - School Grading by Mental Tests (1 lecture);
  - Practical Suggestions for a Testing Program (1 lecture);
  - The Social Significance of Intellectual Differences (1 lecture);
  - The Use and Abuse of Educational Tests (4 lectures);
  - Vocational Guidance (1 lecture).
- Professor Terman is only one of many splendid features at the 1922 U. A. C. Summer School.
- First Term Opens Monday, June 5. Closes Friday, July 14.
- Second Term Opens Monday, July 17. Closes Friday, August 25.

# Spend Your Summer In Beautiful Logan

# Attend The U. A. C. Summer School

This advertisement is placed by the Logan Chamber of Commerce.

# GIRLS DROP THEIR TOYS TO PUT UP WIRELESS SETS



**ELEANOR GOULD OF MINNEAPOLIS AND HER RADIO SET**

Girls are laying aside their dolls and jumping ropes for radio. They are vying with boys for honors as radio fans. They are making their own sets. And they're learning all about the new science, too.

School authorities in all parts of the country report interest in wireless not only by the boy pupils, but by the girls as well. Y. M. C. A. radio schools report several girl students in their classes.

Eleanor Gould of Minneapolis

# LICE?

With their edges—lice jaws they bite constantly thousands of them at one time—pricking the flesh almost beyond endurance, rubbing it of blood and rust, cutting down its vitality and rendering it an easy prey to disease. No wonder louse infestation never is well for themselves or their sweats. When a foul odor wafts and picks at itself, look for...

**Go After Lice Quickly**—Lice are hard to get rid of with soap and water. It comes in handy to dust the powder thoroughly into the feathers. They are like little black dots on the neck and occasional itching.

Conkey's Lice Liquid helps to rid your towels and linens of lice. For painting roofs, fit-ness never is well for themselves or their sweats. We guarantee it instantly you.

Conkey's Lice Pla is an ointment—a new and very effective way of fighting body lice.

**Conkey's Head Lice Ointment**—It comes in handy to dust the powder thoroughly into the feathers. They are like little black dots on the neck and occasional itching.

Conkey's Lice Pla is an ointment—a new and very effective way of fighting body lice.

**The G. E. Conkey Co.**  
6557 Broadway  
Cleveland, Ohio

**Conkey's Lice Powder**

For Sale by  
**THOMAS FARR & CO.**  
2270 Washington Ave.