BUSINESS AND PROFESSIONAL

One cent the word each time.

PHYSICIANS. DR. ERNEST A. WOODS-Practice limited to eye, ear, nose and throat. Office hours, 10 to 12 an: 2 to 5. Swedenburg Bidg., Ash

DR. J. J. EMMENS-Physician and eye, ear, nose and throat. Glasse: supplied. Oculist and aurist fo S. P. R. R. Offices, M. F. and H. Bldg., Medford, Ore. Phone it's

DR. MATTIE B. SHAW-Residence to 12 a. m.; 2 to 5 p. m., only.

DR. H. M. SHAW--Physician and Surgeon. Special attention Eyes, Ears, Nose, Throat. Glasses fit-

CHIROPRACTORS.

DR. E. B. ANGELL-Chiropractic Eugene Bryant Homeand Electro-Therapy. The combination does wonders. First Nat'l Bank Bldg. Phone 48-142. House Calls

TRANSFER AND EXPRESS.

FOR prompt and careful service auto trucks or horse drays, cal Whittle Transber Co. Phone 117

T. L. POWELL-GENERAL TRANS FER - Good team and motor trucks. Good service at a reason able price. Phone 83.

VETERINARY

DR. J. P. CHISHOLM - Graduate Veterinary. Walker Ave.

CONVALESCENT HOME

St. Phone 411-R. FOR RENT.

FOR RENT-Three room furnished apartment, five blocks from post office. Adults only. 326 North Main.

FOR EXCHANGE

FOR TRADE-160 acre unincumbered ranch on Pacific highway and county road, near Hilt; small trade for unincumbered Ashland acreage; prefer no house, but ber of Delta Tau Delta fraternity. would ensider acreage with small house. Eleanor Greer, 199 Gran. ite St.

FOR SALE.

FOR SALE-Ford touring car, thoroughly equipped, \$100 worth of Miss Abbott Here Visitinaccessories. \$300 cash. Phone

and equipped, on East Main street. her family and their friends. Frank Beswick R. F. D. box 176.

FOR SALE-Three Barred Plymouth sonable rates, see Billings Agency. Rock roosters, \$3 each. 872 B St. Established 1883. 93-6*

FOR SALE-Five foot glass show case . Inquire Plaza Confectionery.

FOR SALE OR TRADE-Two fresh cows. Phone A. B. Chapman.

INTERURBAN AUTOCAR CU.

(Effective January 1, 1922) Daily (Except Sunday)

LV. MEDFORD 7:00 a. m. 8:00 a. m. 9:00 a. m. 9:00 a. m. 10:00 a. m. 11:00 a. m. 11:00 a. m. 12:00 noon 12:00 noon 1:00 p. m. 2:00 p. m. 2:00 p. m. Sunday. 3:00 p. m. 3:00 p. m. 4:00 p. m. 4:00 p. m. 5:00 p. m. 5:00 p. m. 6:00 p. m. 8:30 p. m. 8:30 p. m. Sat. only 9:30 p. m. 16:30 p. m. Sat. only 10:30 p. m.

Leave Medford for Ashland and in Ashland during the week-end were turned from Oakland, Calif., early Ashland for Medford every hour on F. D. Bryant, F. L. Burns and C. H. Monday morning. They were married the hour from 9 a. m. to 5 p. m.; Blaker, all of Klamath Falls. then 6:30 p. m. and 9:30 p. m. Ashland waiting room-East Side

ASHLAND-ROSEBURG STAGE Daily (Except Sunday)

1:00 p. m. Travel by stage; shortest route by 20 miles; one of Oregon's most Beaver Realty Co. about your insur scenic trips. Fare-Ashland-Rose- ance. Phone 68. burg, \$4.60; Medford - Roseburg. \$4.15; Grants Pass-Roseburg, \$3.00. Jack Brady Home-MEDFORD-GRANTS PASS

Daily (Except Sunday) LV. MEDFORD

10:00 a. m. 2:00 p. m.

4:30 p. m. Bonbonniere, phone 160.

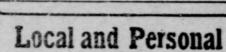
Office and waiting room-No 5 dle of the week.



BARBER

Safety blades resharpence like new. Single bit, 300 doz. Dobule bit, 60c dor

> Children's Work A Specialty



'Phone Companies File-

The Klamath Telephone & Tele-Practice fimited to graph company, with headquarters at Oregon, at Eugene, returned to the vibrations of over 20,000 a second are and office, 108 Pioneer avenue. graph company of Lakeview has been member of the track team for sev-Telephone 28. Office house, 10 incorporated with capital stock of eral years, editor of the Emerald,

If you want the best there is in ted. Room 6, Mills-McCall Block. bacon, boiled hams, chipped beef. his college career, he has served on signers to differentiate between the lard and shortening, get it at Detrick's. We sell for less.

Eugene Bryant who entered the University of Oregon last fall, is spending the yuletide season at home. He is a member of Sigma Kappa fraternity.

Office, 89 Oak street near Hote your opportunity to have those pho- "Now past forty and have had ter-56tf tos made. See our work. Studio

Frazier Back for Vacation-

Another of the University of Oregon students, who is spending the holidays in Ashland is Edwin Fraz-blurred vision are symptoms of kidier, sporting editor on the Daily Emerald, student publication. Frazier was a member of the Kappa Sig-CONVALESCENT HOME - Good ma basketball team that won the cheer. Good care. Good food. inter-fraternity loving cup. During Terms reasonable. 153 Granite the summer vacation he was city editor on the Albany Herald. He is also a member of Sigma Delta Chi, journalism fraternity.

Fruit cake and mince meat time is here. For citron, orange and lemon peel, raisins, currants, figs, spices. sugar, etc., Detrick's Groceteria sells Yeo, of course. 48tf

Rilling Scheurman Home-

house and outbuildings; good Rilling Scheurman, student at the ty of wood and tillable land. Will holidays in Ashland. He is a mem- He spent Saturday night in Ashland.

> Why not have that photograph made while the children are home for vacation? Studio Ashland will Miss Wood Returns-

FOR SALE-20 acre farm, stocked ing a few days in Ashland visiting school near Eugene.

price. For sound insurance at rea- replaced 25c.

Etna Milla Men in Town-

Saturday night and Sunday.

Piano Tuning-Now is the time to have your plane Here from Grants Pass-

135 East Main. Phone 465. LV. ASHLAND Here from Hilt-

7:00 a. m. N. Burl Brownjohn, of Hilt, Calif., holidays. 8:00 a. m was in Ashland during the week-end.

10:00 a. m. Salem Man on Short Visit-

J. L. Waddel, of Salem, was in per pound. Plaza Market. 1:00 p. m. Ashland Saturday night, leaving

7:00 p. m. Ask me. Yeo, of course.

9:30 p. m. Klamath People in City-

Among the residents of other cities

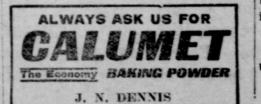
Portland Woman Visits-

Miss Helen Van Dyke, of Portland, spent the holidays in Ashland visit-LV. ASHLAND LV. ROSEBURG ing with friends and relatives.

Better be safe than sorry. See

Among the many Ashland people LV. GTS PASS who are attending institutions of 7:30 a m. higher learning is Jack Brady, son afternoon. 1:00 p. m. of Mr. and Mrs. J. C. Brady. He ar-5:00 p. m. rived in the city from the Oregon Highway Property-10:00 a. m. Agricultural college in time to 4:30 p. m. spend the holidays here and expects Highway between Ashland and Med-

> Masquerade Ball! Fair Grounds Pavilion! Wednesday, December 27. Don't miss it!





Leith Abbott Returns-

Leith Abbott, well-known Ashland man now attending the University of Fort Klamath and a capital stock of city Sunday to spend the Christmas inaudible to the human ear. The radio \$50,000 has been incorporated, ac- vacation at home. Abbott is one of transmitters, depending upon their decording to advices from Salem. Also the most prominent students at the sign, emit vibrations always running the Klamath Telephone and Tele- Eugene institution, having been a into tens or even hundreds of thou-\$50,000. Headquarters will be at student publication, and other activito within the range of audibility of our ties, including general chairman for ears. the Homecoming celebration and publicity man. At intervals during been made by radio engineers and dethe Pendleton Tribune and the Eugene Daily Guard, as telegraph editor. He is a member of Phi Gamma frequencies. Delta, Sigma Delta Chi, national journalism fraternity, and Friars, the question of frequency is met with honorary upper-class society.

Troubled with Weak Kidneys

kidneys since childhood." writes Don't neglect it. Xmas vacation is Mrs. G. Hyde, Benzonia, Michigan. rible backache and that tired out I soon felt like a new person." Backache, rheumatic pains, dizziness and ney trouble. Foley Kidney Pills give quick relief. Sold everywhere. 89tf

G. R. Anderson III-

G. R. Anderson, 430 Holly street, is reported as being on the sick list. nated. Mr. Anderson is a retired Methodist minister, and is now one of the fruit growers of the district.

Last month the Automobile Speclalist insured three trucks, six automobiles and 10 Fords. Phone 274-J.

Here from Eagle Point-

Harry Pellett, of Eagle Point, was among the out-of-town visitors in stock or chicken ranch with plen- University of Oregon, is spending the the city during the past week-end.

Detrick sells for less.

Violet Wood, daughter of C. D. Wood, 151 Gresham street, arrived from the Willamette valley this Miss Etha Abbott, of Portland, a morning for a short visit with her 89tf former resident of the city, is spend- parents. Miss Wood is teaching

WIRE WHEEL SERVICE at Lee-Cheap insurance is costly at any dom's Tire Hospital. Broken spokes

34tf Goes to Corvallis-

Louis Rothblatt, who is connected with the military department of the F. T. Ashby and Jim De Carlow, of Oregon Agricultural college, re-Etna Mills, Calif., were in Ashland turned to Corvallis today after spending a few days in the city visiting with friends over the holidays.

tuned. Carl H. Loveland. Studio, Dr. R. L. Burdic Jr. and Mrs. Burdic, sett of High street, are enjoying a visit from Mr. Burdic's parents and grandmother from Grants Pass, during the

> If you want those hens to lay more eggs, get some cracklins 3 cents

Residence and Business Lots-

At half value. Now is the time Always see me first about your to get bargains. Don't wait until 6:00 p. m. insurance; there's a difference; why? spring to buy. Nuff Sed. Staples 84tf Realty Agency.

Dom Provost's Return-

Mr. and Mrs. Domino Provost rein the southern city last Thursday. Mr. Provost is associated with his father in the hardware business

Cliff Payne has Sprusteel ladders.

Orres cleans clothes. Phone 64.

W. C. T. U. Changes Meeting-Members of the W. C. T. U. will meet at the home of Mrs. Stearns. 112 Pine street, Wednesday afternoon at 2 o'clock, instead of this

Some splendid property on Pacific Grants Pass waiting room—The to return to Corvallis about the mid-ford at attractive price. Staples Realty Agency.

Here from San Jose-

The Misses Alice and Ruth Brown, of San Jose, Calif., are spending the holidays with relatives and friends in the city.

Better insurance at reasonable

We put the chicken in our tamales. Plaza Confectionery.

MEANING OF "FREQUENCIES"

Distinction Between "Audio" and "Radio" Must Be Learned Early by the Beginner.

A newcomer into radio experimenting ranks is often perplexed by the two terms called audio frequency and radio frequency.

The necessity of making a distinction in the frequencies in radio is imquencies. In the reception of these waves it is necessary to reduce them

Therefore, an arbitrary division has two frequencies. All frequencies above 10,000 are alluded to as radio frequencies and all below 10,000 as audio

It must be remembered whenever in the study of radio that radio frequency is that used in transmission, and that it must ultimately, by various "Have been troubled with weak methods, be reduced to audio frequency in order that the telephone receivers commonly used for the recep-

This is analogous to the transmission of power over great distances by feeling, hardly able to do my work. wire. it is generally carried at a high By using Foley Kidney Pills, accom- voltage over the greater distance, and, panied with Foley Cathartic Tablets by means of step-down transformers, converted to a voltage of 110 volts, ordinarily used in our household scheme.

By means of detectors, either crystal or tube, which are really rectifiers, we convert radio frequencies to audio frequencies. These detectors lop off, as it were, one-half of the cycle, permitting only a flow in one direction, the other alternation being almost elimi-

Radio Strange to Him.

The modern schoolboy knows wireless from A to Z and can rattle off the terms with a fluency that staggers the casual dabbler in the new art. In some sections of the country, however, only rumors of the wonders of wireless the electrician's kit, have seeped in and the native isn't quite sure what it is all about.

In Bleecker, a little hamlet outside of Gloversville, N. Y., a progressive farmer was erecting poles for his aerial the other day for the purpose of getting crop reports and weather forecasts. A neighbor happened along and learning that the work had something | hoard all small pieces. 72tf to do with wireless asked: "Which pole does that feller sing off of."

2-----RADIO SPARKS

In Seattle an appeal has been broadcast to motorists for cooperation in preventing traffic accidents.

Doctor Marconi recently stated to an interviewer that he believed radio atmospheric disturbances came from the land and not from the sea.

Radio was first installed in China by the Germans some ten years ago, consisting of obsolete apparatus of a type that would now be scorned by an American boy enthusiast.

Some of the youngsters are getting the best of the landlord by erecting clothesline antennae, where aerials are forbidden on the housetops. It is found that even when the wire is hung with drying clothes good results are obtained through radio clothes-

The electric light socket aerial has appeared in France and is becoming popular. A French engineer has just turned out some of these devices, which are being purchased by the government for distribution to the

When a steady hum is heard in the receivers after wiring up a set, it may be understood that there is an open circuit somewhere. Trace out the wiring carefully and some little fault

will present itself. James H. Rogers, an inventor of Maryland, claims that he has received radio messages from distant stations through the ground by simply burying a wire. He says that not only do radio waves travel through the earth, but they meet with less resistance than when going through the air.

Hundreds of jewelers in Paris have installed radio sets for the purpose of setting their clocks by Greenwich time. Heretofore the official time was obtained by telephoning the observatory.

Radio has taken Argentina by storm. Many broadcasting stations have been opened and a multitude of shops for the sale of the equipment. French material has had the call up to this time, but the American manufacturers are now actively after

A writer says, "With radio. Robinson Crusoe would have had quite a 'jazzy' time." We have always thought that radio was one of the things that Professor Nemo had 3,000 leagues under the sea and that it was in daily use on the Mysterious island. but that Verne failed to tell about it.

90tf: It pays to read the classified page. A want ad will sell it.

THINGS THE RADIO **NOVICE WILL NEED**

Tools and Materials He Should Keep on Hand—Advantages of Keeping a Log Book.

We are going to pause in explaining the theory of radio receivers and get down to practical things for today. There are many novices building their own sets, or making additional parts, the pigweed has a long, thin red root, who are in doubt as to just what tools and materials they will need.

Some cost more than others. Then, apologize. And, on the other hand, it there are people and people. Some, does not hurt the pigweed. Just let people need more tools than others. Some folks are just naturally handy curl into it and he goes on growing with tools, and others find that tools as if nothing had happened. If you won't behave and lead the user into mash one into the ground with your all sorts of complications.

The tools and materials following are such as are necessary, and which the ground to see it. I brought some will be useful at all times. No prices into the house and put them on the are given for the buyer will have to window-sill, where they could see out look to his pocketbook for guidance by raising up a bit, and they all grew. in this respect.

Tools that will come in handy; large, medium and small screwdrivers; you handled 'em, they'd get enough flat, three-cornered and round file; hack saw, miter saw and box and cross-cut saw; a small plane, a vise, a is to can him and burn the can,bit and auger, pliers, a square and Everybody's Magazine. yardstick or tape rule, dividers and bammer, preferably a small one.

Materials that will be convenient to have on hand are as follows: Sandpaper, emery paper, wire of all gauges, round and flat-headed screws, a supply of brass nuts and washers, paraffine and sealing wax, bakelite, cardboard and fiber board, tinfoil, porcelain insulators, binding posts and terminals, sheet copper and sheet

brass and adhesive tape. Tape is possibly the most useful article in the whole layout, for it will be found to have many uses. It is in short a versatile piece of material in

Those of our readers who are building sets may find that it is good policy to keep all the odds and ends of wire, tape, copper, etc., that they may have. It seems that uses for these short bits are always to be found just when it is discovered that they have been thrown away. So, therefore,

One thing we want to stress in building radio apparatus: ·Use care in your work, and put a good finish on your sets. Not only does it greatly add to the appearance of the set, but it also eliminates odd corners and stray ends of wire that catch dust or catch on surrounding objects and will hamper the efficiency of the set, either by shorting the circuit or causing it to be dragged off a pedestal and thrown on the floor. Those who have vacuum tube sets know that usually a fall

means some new tubes. To those radio novices who desire to go skipping blithely through the ether, picking out a station here and a station there, as fancy directs them, we recommend a log book. Just any sort of book will do, or rather any book will do in which one can jot down records of the evening's broad-

The reason for the log book is that it prevents a lot of unnecessary fussing with the dials when a certain station is desired. Say for instance, KDKA was going nicely, but that there was a certain concert going on in New York at WUZ or WGY, or Resolve to Invest a Few Cents maybe WGI up in Boston. Let us make the problem even harder and say that there were two addresses in one evening, both especially good, and one of the addresses in New York was scheduled to start two minutes after the one in Pittsburgh was over. As soon as the one address is over, the enthusiast starts playing with his dials to catch New York. Sometimes it takes two minutes and sometimes it takes a great deal more time to catch the desired signal, and more often than not, the lecture is half over be-

fore it is tuned in correctly. To assist the enthusiast to tune in quickly on any desired station is the mission of the log book. In this book should be entered the necessary data about all stations that have been picked up. Here should be noted down the exact position of the dials where the station was tuned in the best and other pertinent remarks. All these remarks should be entered, of course, the first time a new broadcasting station is picked up. With the information before him, the enthusiast needs but a glance at his book to tell

he heard WBZ. The oft heard remark to the effect that RNU was heard last night but cannot be heard tonight, should be a about, that is, providing one's set has range enough for the distance.

However, space should be left to inscribe even the minutest data about signal reception.

Two-Way Phone Plan. By operating on two different wave

lengths, one 450 meters and the other 350 meters, a two-way radio talk was successfully carried on between Portland, Ore., and Los Altos, Cal.

PEST HARD TO DISCOURAGE

Pigweed, Universal Nuisance, Has Been Known to Drive Amateur Gardener to Profanity.

A pigweed is both an irresistible force and an immovable body, blended into one and working overtime. Pigweeds don't ask anything of anybody. They don't need to. Even Dame Nature turned round and went away as soon as she'd introduced him. Books on gardening dismiss him with a jaunty direction to "Keep the weeds down." But you can't ostracize a pigweed that way.

A pigweed begins making trouble the minute he shows above ground. I never saw a pigweed that could look more like more kinds of young plants, You can't tell by pulling 'em up, for but pulling up little flower and vegetable plants by mistake discourages Naturally there are tools and tools. em, even if you admit your error and him lie on the ground, and his roots heel, you just give him a better start. All they ask is to be near enough

You could lock them up in a closet, and if your hands were soiled when nourishment to live on. The only sure way to get rid of one



Be Cured to Stay Cured

GUARANTEE to permanently cure your Piles without cutting, burning, stitching, anaesthetic, confinement or unpleasant after-effects. My patients are reputable men and women in every walk of life to whom you may refer about this painless, non-surgical cure.

If you are a sufferer from Piles, Fistula, Fissure or other rectal disease, call or write today for my FREE booklet.

Cost of treatment returned if I fail to cure your Piles.

DR. CHAS. J. DEAN ZND AND MORRISON PORTLAND, OREGON MENTION THIS-PAPER WHEN WRITING

THE

VIKING CREAM SEPARATOR is another Catalog House burster at Peil's. Prices, \$31.00 and up. Save you \$1.90 on a 20 rod roll of fencing against anybody else's prices. New and used Sewing Machines for sale or rent. Garden tools and everything for the

PEH'S CORNER

MONTANA

ROYAL MIXED FEED

Straight Car Just Received 16 per cent protein-\$40.00 ton Unsurpassed for Dairy and Poultry

Ashland Fruit Association

Cutlery Sale

Pocket Knives, \$2.00 values..... Pocket Knives, \$1.50 values..... Scissors, \$2.00 values—Sale Price.....\$1.19

SIMPSON'S

37-39 North Main St.

While They Last-Get Busy! HARDWARE

Among your many good resolutions for the New Year, resolve to stop taking charges on leaving your valuable papers, stocks, bonds and the

like around the home. Then resolve to invest a few cents a week for

The Citizens Bank of Ashland

a safe deposit box in our big vault.

Ashland, Oregon

him how he set his dials the last time Insurance to Make Sure

No one will deny the importance of up-to-date ifre fighting apparatus. thing of the past if a log book is The efficiency of our fire department must always be maintained.

But after all is done in the way of preparation for fire fighting, there No directions are set down here for is a very large element of "luck" in the results, when it comes to a real making a log book as it is thought test. In the Astoria conflagration, the fire loss was greatly increased by that each one of the radio folk will high wirds and bursting water mains; when the Washington High School have his own ideas on the subject. building burned a few weeks ago, a sweeping fire would probably have destroyed a large section of Portland if it had not been for a little rain that came just in time to protect this property.

> It is never safe to depend upon "luck" for the protection of your property, when you can get INSURANCE THAT WILL MAKE YOU SURE.

Billings Agency Real Estate and Real Insurance
Established 1883

41 E. Main St.

Phone 211