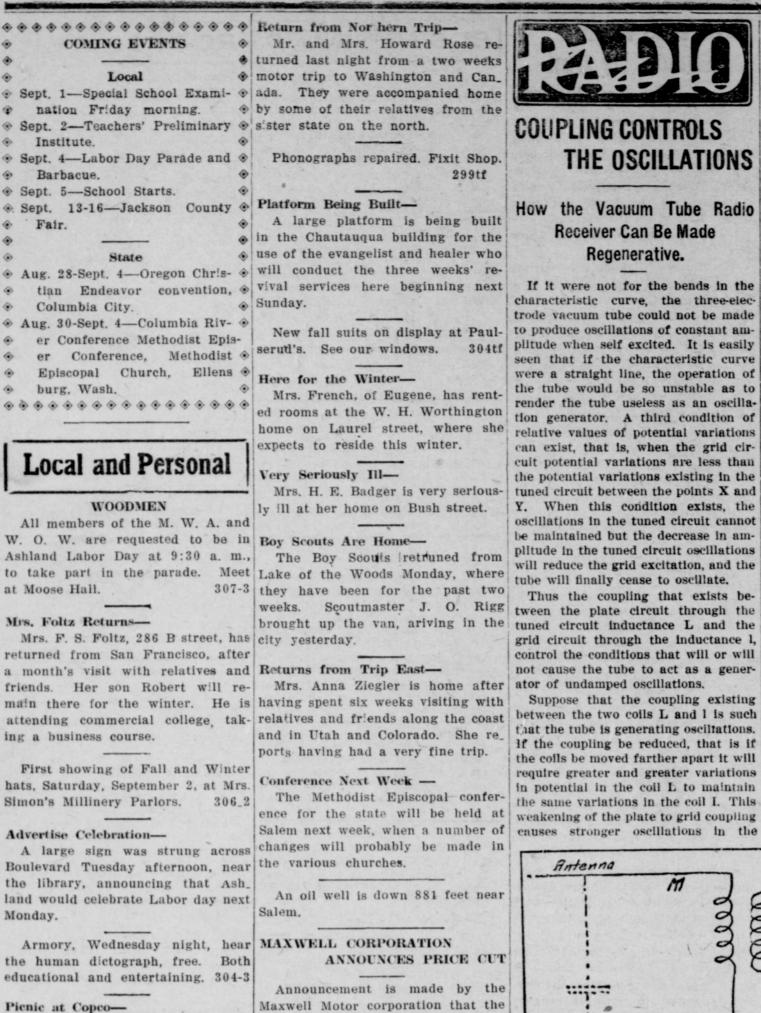
PAGE FOUR



Mr. and Mrs. Cliff Payne, Mrs. prices of the Maxwell coupe and se-McKibben, Job Tozier and Clyde dan have been reduced \$150 effect-Young, motored to Copco Sunday, ive immediately.

where a picnic dinner was enjoyed These reductions, according to



COUPLING CONTROLS THE OSCILLATIONS

How the Vacuum Tube Radio **Receiver Can Be Made** Regenerative.

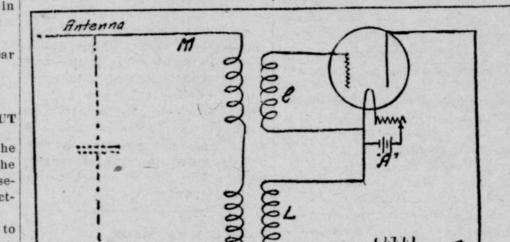
If it were not for the bends in the characteristic curve, the three-electrode vacuum tube could not be made to produce oscillations of constant amplitude when self excited. It is easily seen that if the characteristic curve were a straight line, the operation of the tube would be so unstable as to render the tube useless as an oscillation generator. A third condition of relative values of potential variations can exist, that is, when the grid circuit potential variations are less than the potential variations existing in the tuned circuit between the points X and Y. When this condition exists, the oscillations in the tuned circuit cannot

be maintained but the decrease in amplitude in the tuned circuit oscillations will reduce the grid excitation, and the tube will finally cease to oscillate. Thus the coupling that exists be

grid circuit through the inductance l, control the conditions that will or will not cause the tube to act as a generator of undamped oscillations.

Suppose that the coupling existing between the two coils L and 1 is such that the tube is generating oscillations. If the coupling be reduced, that is if to the entire industry," declares Jothe coils be moved farther apart it will seph D. R. Freed, in an interview pub-

require greater and greater variations lished in Radio Merchandising. "Both in potential in the coil L to maintain the radio dealers and the more stable the same variations in the coil I. This and serious manufacturers are learnweakening of the plate to grid coupling ing a well-needed lesson from this causes stronger oscillations in the slump," he says. "For example, deal-



ASHLAND DAILY TIDINGS

either magnetic or electstatic conpling. In Figure XXXVI the tube was made self exciting by coupling an inductance C connected in the grid circuit to L. an inductance in the tune plate circuit. A development of this circuit is shown in Figure XXXIX.

Here the energy, instead of being directly coupled from the plate to the grid circuit, is first necessary to an intermediate circuit, M-N, and then to the grid circuit. It is necessary of course, that the circuit X-Y and M-N have the same natural period, that is to say, they must be tuned to the same frequency. If the frequency is relatively high, the condenser C can be dispensed with, and the capacity of the plate to filament used as a portion of

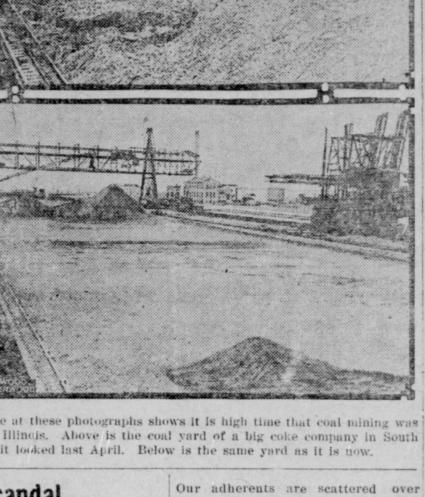
the oscillation plate circuit. The circuit as shown in Fig. XXXIX is inherently the circuit used in low power undamped or continuous wave radio telegraph transmitters. By substituting in the oscillating circuit M-N the capacity of an antenna with respect to the ground, we have the continuous transmitter shown in Fig. XL. By placing a key in the "B" or plate battery to turn the plate battery off and on the start and stop, the tube oscillating dots and dashes can be sent out by varying the coupling between the grid and plate colls I and L and the antenna circuit, the transmitter is adjusted for maximum power output. To adjust the wave length the value of the antenna inductance is varied.

SUMMER SLUMP IS BENEFIT

Both Manufacturers and Dealers in Radio Apparatus Are Learning a Needed Lesson.

"The slump in the radio business during the summer months is a boon Anti-Scandal

key on scandal."



Illinois Coal Piles Are Dwindling

Wednesday, August 30, 1922

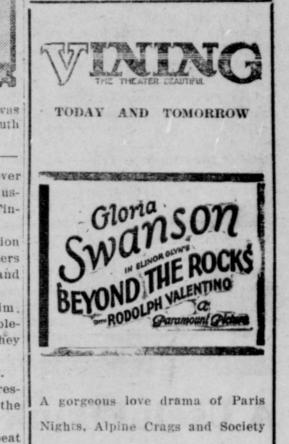
now in circulation in Russia, all the money published prior to 1922 will be withdrawn from circulation by January 1923. Before that date it can be exchanged in the banks for new money; after that date it is valueless. Any old money of small denomination will be withdrawn by October 1 of this year; but the notes from one to five million, and for 50 to 100,000, may circulate until January.

The new notes for which this monéy is to be exchanged is known as the "rouble of 1922" and one such rouble is worth 10,000 of the old roubles.

RAILROAD NOTES

H. A. Culp. assistant superintendent from Dunsmuir, spent Saturday and Sunday in Ashland, looking after the welfare of the company. Assistant Foreman Bess of the S. P. roundhouse, returned from the hospital at San Francisco recently. and is back at his old post again. R. Goodman, who is with the S. P. carpenter gang at Dunsmuir. spent Sunday 'in Ashland with his family.

Oregon is 28th in the United States in motor registration.



Boudoirs.

A glance at these photographs shows it is high time that coal mining was resumed in Illinois. Above is the coal yard of a big coke company in South Chicago as it looked last April. Below is the same yard as it is now.

Britain, United States, Ireland, Aus-**Club Plans To** tria, Holland, France, Hungary, Finland, Spain and Switzerland, **Combat Gossip** "What gives me most satisfaction is that two of our first members were respectively a policeman and

LONDON, Aug. 30 .- "Turn the a hotel keeper." The rules of the society are sim. That is the motto of the latest ple and must be accepted wholesociety in England. heartedly by every member. They

You hold a padlock in the hand, are: with due solemnity turn the key, 1. Get a padlock and unlock it. and pronounce these words: 2. Repeat the pledge in the pres-"I promise to do my utmost never ence of three witnesses and lock the

to say an unkind thing about any_ padlock. 3. To remain a member repeat one, whether true or untrue." And having said, henceforth, you the promise with an open padlock

are admitted a member of the "Pad- in the presence of three members

with Ray Long. Clyde was trying William Robert Wilson, president, out the new gears on his car and are the direct results of manufacreports that they work perfectly. turing economies brought about by

a demand for Maxwell de luxe closed Sweet Cider, made fresh every cars unprecedented in this price day, two gallons 75c; one gallon 40c, field.

delivered. Phone 9-F-11.

Return from Lake-

Mr. and Mrs. J. N. Dennis re- design and unusually fine finish en- coupling cannot increase the plate cur- paratus in the hopes that they will be turned from Lake of the Woods listed the most enthusiastic com- rent variations so that the transfer of able to dispose of it. They are learning several days on an outing from from the motor car industry itself. the daily grind of selling groceries "The Maxwell closed cars have and feed. The Fred Engle and Will probably caused more favorable Dodge families have stalso arrived comment by their sheer good looks home from the lake after short out- than any other production of recent coupling at which the tube will start ings there.

See the free entertainment Wednesday night by the Miracle Man at performance, durability and econ_ 304-3 omy." the Armory.

Hotel Oregon.

Phone 340-J.

Phone 411-R.

ones.

411-R.

Agency, 83 North Main. 306-5

Visits Relatives-

A new white and sugar pine mill Robert Dennis, of McCloud, Calif., has been opened at Grants Pass. was a guest at the home of his uncle J. N. Dennis, Monday. TOO LATE TO CLASSIFY

Dancing at the Big Hot Springs Pavilion, Wednesday and Saturday nights. 304tf

Former Resident Visits-

Mrs. Minnie Magoon, of Portland, is making a visit here with relatives and friends. Mrs. Magoon is a for. mer resident of Ashland, and may decide to remain here indefinitely.

Detrick sells butter for less.

Leave for Denver-

Mr. and Mrs. Robert Clark, who have been making the Hotel Oregon their headquarters for the past few weeks, left this afternoon on train 53 for Denver, Colo., where Mr. Clark was called on account of some mining interests in that section of the country.

Good insurance at good rates. Phone 274-J. Yeo of course, 265tf

Here from Washington-

Mr. and Mrs. Frank Smith and daughter, of Port Townsend, Wash. are in the city visiting with Mrs. Smith's sister, Mrs. J. H. McKenzie. They have already taken advantage FOR SALE-We have on our list at of several of the scenic trips afforded by the county, and plan to return to their home the latter part of fhe week.

Cliff Payne makes book ends.

Returns from Beach-

The Homer Billings family arrived home last evening from a two weeks outing at the sea shore.

WANTED - Pantrywoman. Ashland. Gravenstein Apples - Windfalls. 50 lb. box, 75c delivered. The finest FOR SALE-A few good spring circuit. This may be accomplished by

304tf

Ground Fig XL

plate circuit. The limit is reached ers are beginning only now to realize "When the present_day Maxwell when the plate current reaches the the truth of the fact that they cannot closed cars were first introduced," saturation point. After this point is afford to carry a large and heterogene says Mr. Wilson, "their distinguished reached, further weakening of the ous lot of odds and ends in radio apnow decreases, and any further reduc- terical overstocking of apparatus in an tion in coupling will cause such a re- effort to meet the spasmodic demand duction in excitation that finally the of radio 'faddists' is not going to prove tube will cease to function. There is, then, a certain degree of beginning to realize that dependable years. In the past ten months in to oscillate, a certain degree of couthe hands of owners, they have ex- pling which will produce maximum oscited just as favorable comment for cillation in the plate circuit and another degree of coupling at which the

tube will cease to oscillate. From the foregoing short discussion it can be seen that a three electrode vacuum tube can be made to function as a self excited generator of an undamped alternating difference of po-

tential at radio frequency, or by excit-FOR RENT-Rooms. Special rates ing the tube externally by, for examto teachers for the school year. ple, an incoming radio signal, the 306_4 amplified plate circuit variations in potential can be fed back into the grid FOR SALE-At real bargain-two and held to further increase the ampli-Ford delivery cars. Buick Sales

service and dealer co-operation." tude of the plate circuit variations. In

SPARKS It is reported Doctor Marconi has obtained a speed of 200 words a minute in transoceanic radio messages. Utah telephone companies are fighting the use of radio for commercial purposes. The old story of trying to sweep back the

profitable in the long run. They are

apparatus, bought to meet the varying

radio conditions, is more to be relied upon than unknown apparatus that

looks good in the catalogue, and is

merely an ornament upon the shelves.

are realizing that the time of 'order

taking' is past and that the time of

'order getting' is here. They are learn-

ing now, if they didn't know it before.

that in order to sell radio apparatus,

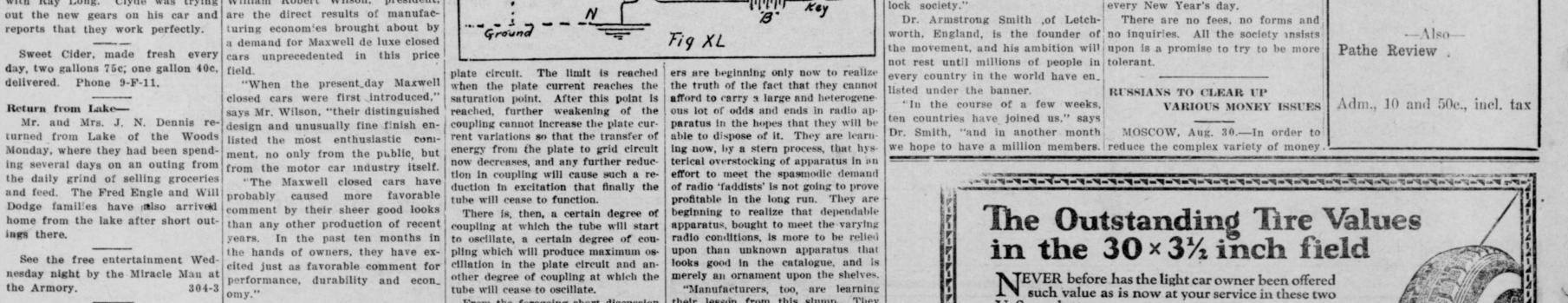
they must give good value, serviceable

merchandise, attractive prices and real

"Manufacturers, too, are learning their lesson from this slump.. They

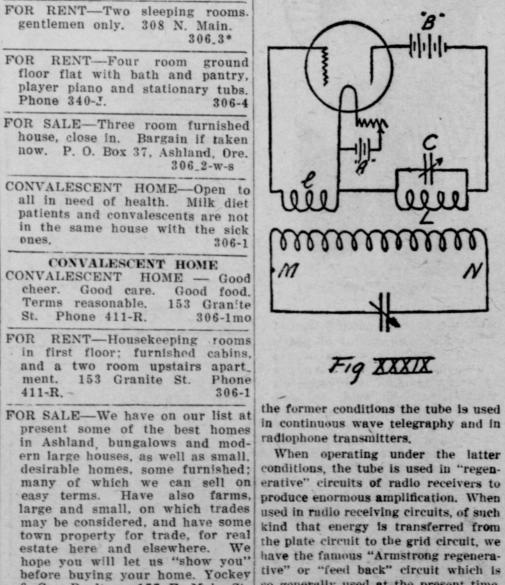
waves. A San Francisco paper prints a funny picture of a young woman suing for divorce on the ground of "radio." She told the judge her husband hadn't noticed her for three weeks. It is said the youngest licensed radio operator lives in Los Angeles, in the person of Bobbie Garcia, aged eight years. He is the son of an electrician and it is claimed helped to build the first radio station on the Pacific coast.

Three children were recently burned to death at Aiken, S. C., in a fire resulting from a short circuit in a radio transformer. The national board of underwriters is sending out warnings of the necessity for protecting radio wires from lightning and light and power currents. Radio is co-operating with the farmers' granges in the East, giving the latest prices for fruits and vegetables, which are posted for ready reference. The farmers claim false quotations have been given them heretofore by unscrupulous dealers in the big cities, and they have in this way been defrauded of large sums.



U.S. products-ROYAL CORDS-the measure of all automobile tire values-both clincher and straight side-\$14.65. The New and Better USCO-thicker tread, thicker sidewalls, more rubber-\$10.65.



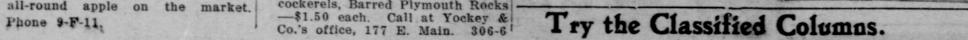


Any vacuum tube radio receiver can

be made regenerative by arranging the

circuit in such a manner that the plate

circuit energy is fed back into the grid



Hotel

306-2

306 w-s

& Co., Realtors, 177 E. Main St. so generally used at the present time.



