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 C. K. LOGAN, Editor

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Fraternal Orders and Societies
 Advertising for fraternal orders or societies charging a regular initiation fee and dues, no discount. Religious and benevolent orders will be charged the regular rate for all advertising when an admission or other charge is made.

What Constitutes Advertising
 In order to allay a misunderstanding among some as to what constitutes news and what advertising, we print this very simple rule, which is used by newspapers to differentiate between them: "ALL future events, where an admission charge is made or a collection is taken, IS ADVERTISING." This applies to organizations and societies of every kind as well as to individuals.

All reports of such activities after they have occurred are news.
 All coming social or organization meetings of societies where no money contribution is solicited, initiation charged, or collection taken IS NEWS.

CHOOSING A PROFESSION
 School opens Tuesday. Colleges and universities will resume the work of the year in a few weeks.

How many students entering high school this year are doing so with their eyes opened to the future? Do they understand themselves, what kind of work they are best fitted for, and do they pursue a course of study along these lines? Too many of them do not.

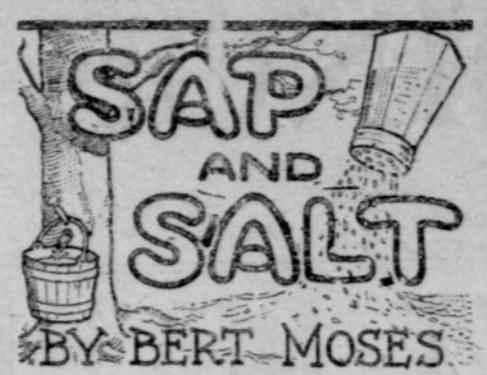
Every year the state institutions of higher learning are forced to drop students, many simply because they did not choose the proper profession. Not profession, in the generally accepted meaning, but their life work.

A student goes to college. The environment is strange. The system of study, of attending classes and instruction is also different from that to which he or she has become accustomed during the four years of high school. He sees some one that has made a name for himself at college and is taking a certain prescribed course of work. Perhaps the title of the subjects attract him. It sounds nice. He would also like to engage in this kind of work. The labor is congenial. He wears a white collar. The course is taken. At the end of a year or two it is discovered that nature has not adapted him for this particular type of work. Interest in the subject is lost, grades fall lower and lower. The black veil of disappointment covers him. He has no heart in his work, and he leaves school, not realizing that it is not the course or the school, but himself, that is to blame. Result—another young man or woman enters the world with but half an education.

College portals are not the proper places to decide upon a profession or a career. This should be done in high school, and work taken that will lead up and prepare the student for the final four years, during which time an opportunity is given for deeper study and research into the subject. Study yourself, have some one that understands the field you desire to enter, talk with you. Decide early, and then bend all of your energies to that end, and a successful career in the chosen profession and not disappointment will be the result.

SUPPORT YOUR HOME TOWN
 All too often goods purchased away from home, scenes from afar, in fact, the hunt for the proverbial pot of gold at the foot of the rainbow, attract those who should be cognizant of the advantages of home products, home labor and home attractions. In support of the old home town, the Roseburg News-Review says:

No one will question the fact that communities use home-manufactured goods and trade with home merchants, it makes for brisk conditions. In turn, it is the duty of the merchant to find a market, and the highest possible market at that, for every pound of produce the local growers have to offer. Cash should be the price paid for farm, orchard, garden or poultry and dairy products. Cash is then available for the producers and mechanics, professional and business interests to pay for what they get. The circle is an endless one, and trading is lively, everybody enjoys the benefits of such a course. However, it is too often the case that some one concludes that he can buy cheaper from some faraway concern, and so makes out an order and sends for the goods. Just that much money is lost to the community, and it is very much like a broken cog in a machine that has been running smoothly. Cash out is a direct loss to the local merchant. It also is a loss to the producer, because it lessens the amount that might otherwise be available for buying local products. If there is a house to build, a bill of lumber needed, doors, windows, etc., employ the neighbor who is a carpenter, or buy the manufactured articles of the factory in the home town, or that are made in your county. Make it a point to employ only resident labor on all work, public or private, and in town labor will doubtless show its appreciation by buying of the home dealer. This practice can be followed by men and women in every avocation and industry, and the habit cultivated and religiously adhered to, will make for the wealth and prosperity of entire communities and commonwealths.



Truth is no stranger than it is scarce.

An "artistic temperament" is about fifty per cent jealousy.

The law of gravitation is always at work on a man's reputation.

Possibilities are the raw materials out of which all great things are made.

The most needed spare part to carry on a bad road is a good temper.

Sooner or later human birth control will be made compulsory to make room in the world for the automobiles.

HEZ HECK SAYS:
 "Undertakers is gettin' more out o' bootleggin' than the bootleggers themselves."

tured goods and trade with home merchants, it makes for brisk conditions. In turn, it is the duty of the merchant to find a market, and the highest possible market at that, for every pound of produce the local growers have to offer. Cash should be the price paid for farm, orchard, garden or poultry and dairy products. Cash is then available for the producers and mechanics, professional and business interests to pay for what they get. The circle is an endless one, and trading is lively, everybody enjoys the benefits of such a course. However, it is too often the case that some one concludes that he can buy cheaper from some faraway concern, and so makes out an order and sends for the goods. Just that much money is lost to the community, and it is very much like a broken cog in a machine that has been running smoothly. Cash out is a direct loss to the local merchant. It also is a loss to the producer, because it lessens the amount that might otherwise be available for buying local products. If there is a house to build, a bill of lumber needed, doors, windows, etc., employ the neighbor who is a carpenter, or buy the manufactured articles of the factory in the home town, or that are made in your county. Make it a point to employ only resident labor on all work, public or private, and in town labor will doubtless show its appreciation by buying of the home dealer. This practice can be followed by men and women in every avocation and industry, and the habit cultivated and religiously adhered to, will make for the wealth and prosperity of entire communities and commonwealths.

RADIO

VACUUM TUBE USED AS AN OSCILLATOR

Transforms Direct Current Energy Into Undamped Alternating Current of Any Frequency.

As an oscillator, a three-electrode vacuum tube has the property of transforming the direct current energy supplied to the plate circuit into an undamped alternating current of any desired frequency. By connecting the tube functioning as an oscillator in the proper electrical circuit, alternating currents have been obtained ranging in frequency from one-half cycle per second to 150,000,000 cycles per second. In fact, a vacuum tube used as an oscillator is about the only source of undamped alternating current at radio frequency available for the amateur.

Undamped or continuous wave telegraphy and radio telephony are made possible only by use of the vacuum tubes.

When the three-electrode vacuum tube was functioning as an amplifier it was explained just how operating the grid at a midpoint of the characteristic curve caused the plate current to vary synchronously with the grid potential. Not only did the plate

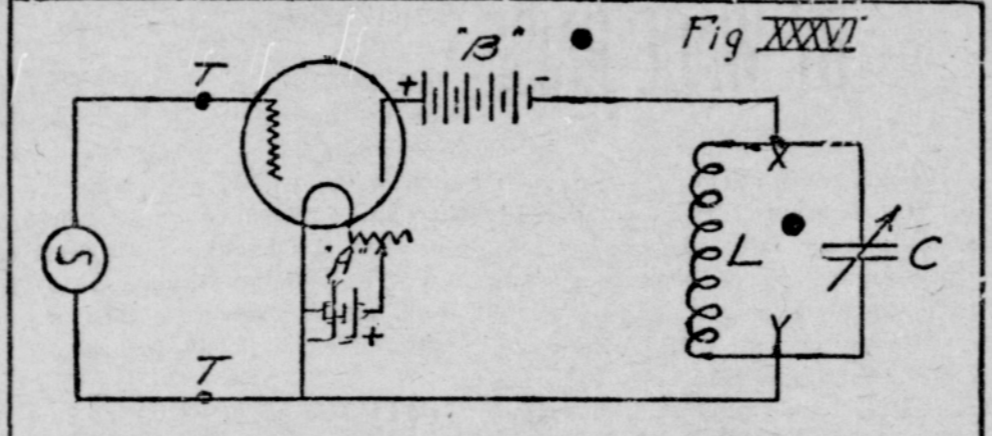
the tuned circuit, between the points X and Y, and both are increasing and decreasing together, that is in phase. The oscillations in the tuned circuit will be sustained or undamped.

The amplitude of the oscillations will neither increase nor decrease. Should the potential variations in the plate circuit be greater than the potential operating in the tuned circuit, between the points X and Y, then the oscillations in the tuned circuit will increase in amplitude until the tube becomes saturated. At this point the upper and lower bends of the characteristic curve keep the amplitude of the plate circuit oscillations from further increasing as the amplitude of the grid circuit oscillations are increased.

SOME TRUTHS ABOUT STATIC

It Exists in All Seasons and Can Be Reduced by Several Known Processes.

In an exceedingly interesting article in Radio Merchandising, John Walker Harrington discusses the question of summer static. "What are the facts of static?" he asks. "Static consists of strays or of certain electrical disturbances which must be counteracted if we would have perfect transmission. It furnishes a means of relieving the tedium of success, just as engine troubles keep the automobilist from drifting into the calm of a smug complacency. It is not well for a radiolist to be too sure of himself, and static is an antidote to inflation, which is just as good in winter as it is in summer. There is static when there is snow and rain—and plenty of it when the

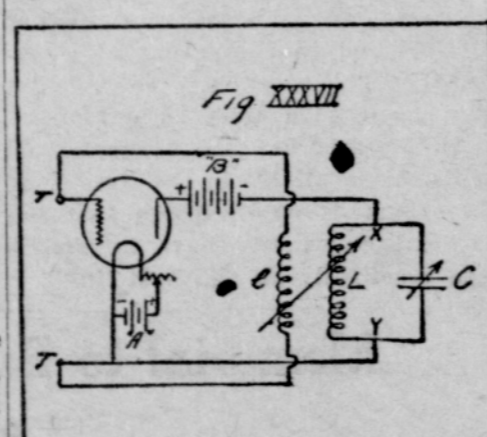


current vary synchronously with the grid potential, but if the plate circuit were tuned the potential variation in the external plate circuit was an amplified reproduction of the change in grid circuit potential.

In Fig. XXXVI is shown a three-electrode vacuum tube with an alternator furnishing an alternating difference of potential to the grid circuit at T-T'. The plate circuit of the tube is connected to a circuit containing an inductance L and a capacitor C, which together form a tuned circuit, between the points X and Y. By adjusting the value of the variable condenser, C, the natural period of the tuned circuit between X and Y can be made the same as the frequency of the alternator furnishing the alternating grid potential applied to the grid circuit at T-T'. When this condition is reached, the tuned circuit between X and Y becomes an infinite impedance in the external plate circuit. The potential variations between X and Y are now maximum and are exact amplified reproductions of the potential variations applied to the grid circuit by the alternator.

When a three-electrode vacuum tube is used as a source of undamped alternating current, it is not excited by an alternator connected to the grid circuit. Instead some of the output of the plate circuit is coupled back to the grid circuit, thus making the tube self-exciting. Fig. XXXVII shows how this is accomplished.

In place of the alternator that was connected across the grid circuit at T-T' to externally excite the tube by applying an alternating current to the grid circuit, there is an inductance L. The two coils forming the inductance L and L are placed close together so that the potential variations that exist between X and Y will be trans-



ferred from L to the grid circuit through the medium of the coil L, which has replaced the alternator.

Any disturbance in the circuits—electrically—such as the tuning of either the A or B battery will cause a change between the points X and Y. This change will be transferred from the plate circuit to the grid circuit by the magnetic coupling existing between the two coils L and L. The frequency at which the tube will oscillate will depend on the values of L and L, while the amplitude of the oscillator will be determined by the degree of coupling that exists between the two coils L and L.

The grid potential variations impressed across the terminals T-T' by the coil L have the same effect in the plate circuit as a potential E (when K is the amplification factor of the tube) times as great applied directly to the plate circuit. When the plate circuit potential variations are just equal to the potential variations in

thunder rolls. As there is usually more lightning in the hot months than in the cold ones, we are likely to have a little more static in warm weather.

"The reduction of static is a process which has its own technique and is as much a part of the game as the meeting of storm conditions is an essential factor in navigation. By making more use of the three-electrode tube, by tuning receiving instruments more sharply, by employing directional receiving antennae so that the loop is turned toward the point from which the message is coming, static may be, and is, reduced and even eliminated. The amateur knows it thoroughly well, and the dealer knows it. It has merely become the custom to speak in awe-struck tones about this condition as though everybody would be deeply offended, if it were not regarded as something to be dreaded and feared."

TIPS TO RADIOISTS

The Buffalo News says: "By throwing a kiss by wireless a Buffalo girl will christen the new broadcasting apparatus." Who wants to be kissed in the ear?

A Freehold (N. J.) paper suggests that some genius arrange a radio set for the farmer's plow handles, so he may be entertained while covering the many weary miles of furrows.

The radio presents great possibilities in the way of travelless honeymoons. In their little nests the newlyweds can hear the roar of Niagara, the waves beating on the seashore or the clerk in a \$10 a day hotel quoting rates.

An appropriation of \$68,000 has been asked of the city of Chicago to purchase a further supply of radio apparatus for its police department. Chicago claims to be the first city to apply radio to police purposes, and it has found this crime-detecting utility a great success.

Recognizing the popular demand for radio outfits, plans for the construction of a new apartment house in St. Louis, Mo., call for the installation of a large receiving set on the roof, which will be connected with each turn on a switch and hear radio concerts and programs.

An estimate based on manufacturers' reports show that more than \$5,000,000 a week is being spent on radio equipment in the United States. Since the new art became popular in Canada the increase in sales has increased 100 per cent each month since December, the month of April showing an estimated increase of several thousand per cent in sales over December, 1919.

The unemployment problem of engineers and electrical technicians has been solved by the radio boom, according to a report issued by the Federated American Engineering Societies. Since January 1 the society has placed in employment more than 900 engineers, and is continuing its placement at the rate of 20 a day. Electrical and mechanical engineers benefit mostly by the growth of the new industry.

ESOP'S FILM Fables



A Hippopotamus's wife
 Led him a greatly hen-pecked life,
 And not infrequently she'd term
 This Hippopotamus "A Worm!"
 "The Worm will turn," cried Mr. Hip
 And took a drink—and bought a whip.
 But though he cracked the whip and roared
 His wife soon had the Hippo floored.
 Moral: a worm may turn a bit
 But fail to get away with it!

MEASURELESS BALLOT MAY GREET NOVEMBER ELECTION

SALEM, Or., Sept. 1.—Prospects of a measureless ballot at the November election, in spite of the nine referred and initiated measures, are seen by state officials here as the result of recent developments in the attack on the petitions filed for the Green salmon fishing bill and the Albright interest rate amendment.

Should the court uphold the contentions of the contestants who are attacking the right of these two measures on the ballot because of alleged irregularities in connection with the certification of the names on the petitions, it is believed that similar attacks will be launched against the other measures in an effort to keep them off the November ballot.

In the attack on the salmon fishing bill as in the attack on the interest rate amendment, it is alleged that thousands of names on the initiative petitions are not legal because they were certified to as to the status of the petitioners by notaries public who could not know, personally, the qualifications of the signers and were, therefore not competent to certify to their legality.

The practice of employing notaries public as professional circulators of initiative petitions is said to have been followed in this state for years, the practice being attacked as a violation of the spirit of the initiative and tending to flagrant abuse of the privilege.

KING'S DAUGHTERS HOLD PICNIC IN LITHIA PARK

The King's Daughters society of the Presbyterian Sunday school held a picnic lunch on the greensward in the park Wednesday noon. Fourteen members, including Baby Bowman, the mascot, were present, and such a spread! "Let health and appetite wait on each," says Cowper. They did, and rolls, salads, ice cream and cake disappeared with ken relish and much gay chatter. The special guests were Miss Grace Leslie, who returns to college soon; Mabel Troit, who goes to Drain to teach, and Nellie Hofe, who will teach in Jacksonville again this year.

During the past four years, 40 girls have been connected with this class. Letters have been recently received from the following former members: Alice Brown and Gwynne Gammon, San Jose, Calif.; Elizabeth Lennox, Patterson, Calif.; Inez Reeder and Hazel Green, Portland; and the famous Ramabai orphanage at Mukti, India, where the class supports a little orphan girl.

The party was a huge success.

Indigestion? Try Ironized Yeast

Do you suffer with indigestion or dyspepsia? Are you troubled with that uncomfortable bloated feeling after meals? Are you bothered with frequent headaches, gas, nausea, or chronic constipation? If so you should lose no time in trying Ironized Yeast, which has brought amazing relief to thousands of stomach sufferers. Simply take two tablets with each meal. Then watch the results. See how your appetite immediately improves. Note how quickly the bowels become regular—how painful and distressing symptoms of indigestion disappear. In a remarkably short time you will have no thought of stomach trouble. Eating will become a pleasure. You can get real joy out of every bit of your food. Get Ironized Yeast today. Then experience the blessed feeling of being able to eat a hearty meal without the least thought of discomfort. To try Ironized Yeast entirely free simply mail post-card for Famous 3-Day Test. Address Ironized Yeast Co., Dept. 103, Atlanta, Ga. Ironized Yeast is recommended and guaranteed by all good druggists.

Development of Oil Shale and Kaolin Deposits Bids Fair To Make Ashland Southern Oregon's Industrial Center

Work of exploiting the resources of Ashland along industrial lines bids fair to make more progress within the next 60 days than its scenic resources have in the past 60 years.

Lying practically at the doorstep of the city are two great fields, almost unlimited in quantity, of oil shale and kaolin, the latter product used in the manufacture of crockery and pottery.

Years ago, kaolin was hauled to Ashland in wagons, and carload after carload shipped to Portland. The project was ultimately given up, owing to the great expense incurred in making the shipments. It was decided then to await the development of some kind of cheap fuel. The sudden development of the oil shale deposits seems to solve the question.

Recently the oil shale deposits attracted the Hartman syndicate, who, after carefully studying the field, placed an order in the east for a huge retort, weighing 90,000 pounds. Shipment of the retort is being delayed temporarily, due to uncertain railroad conditions. For the purpose of demonstrating the principles involved in the enterprise, a one ton retort has been put in operation in a local garage, where it is performing in a more than satisfactory manner.

The oil shale deposits comprise a territory of 3160 acres, eight miles east of north of Ashland, at the head of Antelope valley, and between Grizzley peak and the Dead Indian road. The retort, it is hoped, will be placed on the ground before snow falls in the mountains, and the plant in actual operation by next May. This retort will have a capacity of 250 tons, with a productive, ness of 500 barrels of a very high grade oil, with a paraffin base, a day. This, it is said, can be produced at the cost of 40 cents a barrel.

Besides the oil, numerous by-products are obtained. From the spent shale, when subjected to immersion

in clear water, a black scum arises, which is pure lampblack. The residue of the shale is a high grade fire clay, particularly adapted for the manufacture of tile and sewer pipe. In producing the oil, there is generated considerable canshead gas, of the same quality used for general heating and lighting purposes. This can be obtained at the rate of a million and quarter cubic feet every 24 hours, sufficient to furnish light and heat to the entire Rogue River valley at a very low cost.

With the possibility of cheap fuel in the near future, interest in the old kaolin deposits is being revived. There is an entire cliff of this substance about 2½ miles east of the oil shale field. Requests for samples have reached the chamber of commerce at various times during the past few years from eastern manufacturers, but owing to the great expense of obtaining it, little has been done toward developing the kaolin deposits.

Two Portland men were in conference with H. W. Hartman, head of the syndicate, a week ago, during which they inquired chiefly as to the probability of gas being furnished in the event of a factory being established here for the manufacture of crockery from kaolin. Upon receiving the information that it would simply be the problem of piping the gas a matter of a few miles, they returned north.

RATS DIE

 When They Eat
STEARNS' ELECTRIC PASTE
 It also kills mice, gophers, prairie dogs, coyotes, wolves, cockroaches, water bugs and ants. A 5c box contains enough to kill 50 to 100 rats or mice. Get it from your drug or general store dealer today.
 READY FOR USE—BETTER THAN TRAPS

Fresh Fish Thursday and Friday
FRUIT JARS AND TRIMMINGS
 Extra thick black Mason rubbers, per dozen.....10c
 2 doz. for 15c; 4 doz. for 25c
 Monopole white rubbers—per doz. 10c; 3 doz. for... 25c
 Economy lids, per dozen 30c
 Mason lids, per dozen 30c
 Kerr caps, per dozen 15c
 Jelly glasses, tall or flats, per dozen..... 50c
 Heavy, clear water glasses, each 5c
 Stone jars, per gallon 25c
 Mason jars, per dozen—pints 90c
 Mason jars, per dozen—quarts \$1.10
 Mason jars, per dozen—half gallons \$1.60
 Economy and Wide Mouth Mason jars, per dozen—
 Pints \$1.20
 Quarts \$1.35
 Half Gallons \$1.75

PLAZA MARKET
 61 NORTH MAIN STREET

Cool Kitchens for Hot Days
 A New Perfection Oil Cook Stove in your kitchen will assure a cool and pleasant kitchen in the hottest weather. The New Perfection Stove is a tested, guaranteed product, and will do all the work of your wood range without heating the kitchen. Cooks as fast as gas and is absolutely reliable. We have them in two, three and four burners. Come in and let us show you the numerous features that make them the best stove for summer use.

SIMPSON'S HARDWARE
 37-39 North Main St. Phone 203

A Useful Bank
 Usefulness is the real test of anything—an automobile, a tractor, an airplane, or a bank
 At this institution, the success of our service is measured by its usefulness to patrons.
 Can we be of additional use to you?
The Citizens Bank of Ashland
 Ashland, Oregon

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Try the Classified Columns.