OIL BOOM DAYS IN MEXICO ARE OVER, PRODUCERS SAY

Tampico, Mexico—Oil boom days in Mexico are over, in the opinion of American oil men here, as a result of finding emulsion and water in the Toteco-Cerro Azul pool.

Oil industry in Mexico has entered the period of stabilization, American oil men say.

"The time has come when the same group of capitalists controlling several subsidiary concerns will quit duplicating plants and develop on a co-operative plan." A resident manager of one of the largest organizations told me.

"The prospective oil production in Mexico is absolutely unknown, but there is every indication from a geological point of view that it will still maintain its lead as one of the greatest oil producing countries of the world.

"Future production of oil in Mexico will not in all probability be of a spectacular kind."

Oil men here pointed out, however, that there is no reason why the development in the Mid-Continent field in the United States, because practically the same organizations are working both fields.

Tampico, as a result of the new developments in this field, has reached the end of its "mushroom' growth in the opinion of the Americans here. From this time on, it is expected that this city and district will develop along more comparative lines, with agriculture being an important factor.

This development along agricultural lines will also affect the Americans in this district, because of the fact that probably as high as thirty percent of the land holders between this city and Monterey along the railroad lines are Americans.

The finding of emulsion and water in the Toteco-Cerro Azul pool will probably mean a decrease of approximately 10000000 barrels in the monthly production of light crude beginning about September 1, oil men estimate. It also means, it is said, a decrease of approximately fifty per cent in the oil taxes receipts by the Mexican government.

RADIO

MORE ABOUT VACUUM TUBE AS A DETECTOR

How a "Three-Electrode" Is Connected in a Simple Radio Receiving Circuit.

Obviously working the tube at a point on the upper bend of knee of the characteristic curve would produce the same symmetrical changes in the plate circuit by symmetrical changes in the grid potential as it will if the tube is worked at the lower end of knee of the curve. However, the alternating current applied to the grid would now produce a large decrease and a small increase of the plate current, the reverse of that shown in Fig. 9. The objection to working the tube on the upper bend of knee of the curve is that when no potential is applied to the grid a relatively large current would flow in the plate circuit and rapidly exhaust the "B" battery.

Should the tube, by means of the potential applied to the grid, be made to operate at a point on the characteristic curve midway between the upper and lower bends—that is, on the straight part of the curve, symmetrical variations in the grid potential would cause symmetrical change in the plate circuit current and the tube would not function as a detector.

Fig. 10 shows how a three-electrode vacuum tube is connected in a simple radio receiving circuit. The "B" battery furnishing the necessary plate potential is connected with its positive side through the phones to the plate. The filament is heated to the required temperature by the battery "A." The incoming radio frequency alternating current is applied to the grid and the negative side of the filament through the "C" battery. By connecting the negative side of the filament to the midpoint of the "C" battery a positive potential can be applied to the grid by moving the slider on the "C" battery potentiometer up, or the grid can be made negative with respect to the filament by moving the slider on the "C" battery potentiometer down.

In practice a "C" battery is not used to force a three-electrode vacuum tube to function as a detector.

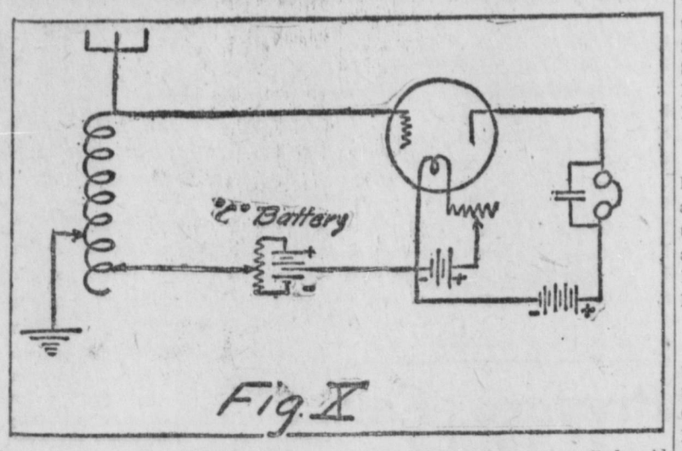

Fig. X

Fig. 11 shows how a so-called grid condenser and a grid leak resistance are used in conjunction with a three-element vacuum tube so that it will function as a detector in a radio receiving circuit.

The grid condenser is connected in series with the grid of the tube and shunted by the grid leak resistance. The grid condenser will allow alternating current to flow to the grid but will not allow any charge that might collect on the grid to flow through it to the filament. The only way a charge that might collect on the grid could flow to the filament would be through the high resistance of about 500,000 to 2,000,000 ohms and would allow the charge on the grid to leak off slowly.

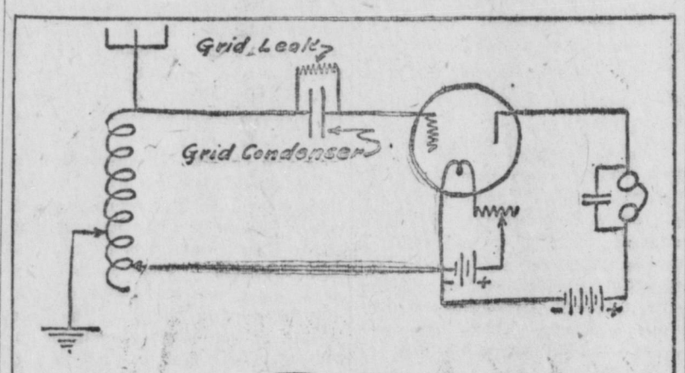

Fig. XI

USING ELECTRIC LIGHT WIRE

Experts Tell the Safe Way to Employ This System for Radio Receiving.

Since the announcement that the bureau of standards of the department of commerce had perfected a method of employing electric light wires in place of aerials, considerable experimenting has been done by various amateurs, some of whom have had good luck while others succeeded only in blowing a large number of fuses.

Engineers of an eastern electric light company have offered the following suggestions to amateurs:

"First—Successful results have been obtained so far only with audion bulb sets. Crystal sets receive the signals, but for some reason they are very weak and indistinct.

"Second—No set should be used on this system without air or oil filled condensers, placed in series with either the antenna circuit or the ground circuit—preferably in the antenna circuit.

"Third—A fuse not heavier than one-half ampere should be used in series and just ahead of the antenna connection.

"Fourth—An ordinary separate detachment plug—i. e., one with two blades connecting the two separate halves of the plug—is used. Only one wire is run from this plug, the other binding screw left undisturbed. This single conductor wire should be long enough to reach from a handy electric light socket to the table where the instrument is located and should terminate in the fuse mentioned above. In case an externally connected condenser is used, the circuit should be run from the fuse to the condenser and from the condenser to the antenna binding post of the receiving set.

"In sets where the condenser is built into the instrument the connection from the fuse is run directly to the antenna binding post. All other connections should be exactly the same as for conventional overhead aerial receiving.

"Screw the attachment plug into the electric light socket and tune as usual. In case no signals are received reverse the blades in the attachment plug by simply pulling the attachment plug apart and turning the lower half half-way around.

"Caution—Under no consideration should the connection from the electric light socket be brought directly into contact with the ground connection, or fuses will be blown in the house circuit and the whole house left without light. Operators should also be careful about making contact themselves bodily with the electric light wire and ground at the same time, in order to avoid shock."

SHORT FLASHES

The first national radio compass station on the Great Lakes was recently installed. Other stations will shortly be in service when the "graveyard" of the lakes will have lost its terrors.

It is claimed that John Hayes Hammond, Jr., and Dr. E. L. Chaffee have invented an appliance that insures secrecy in wireless. The system is based on principle of producing characteristic waves to which only especially equipped receivers are responsive.

Secretary Hoover's force of "ether cops" may take the form of special government detecting stations where aerial compasses could be arranged so as to detect the direction from which interruptions come. By a series of relays, the government station nearest the violating amateur could be notified and the source of trouble stopped.

Now the fans in England are having a hard time with their air. According to a report from England there are only 8,000 authorized amateur operators in the United Kingdom. The London Daily Mail states that the reason for the art's tardy growth is the fact that "hampering and senseless restrictions in this country prevent wireless amateurs from getting practice. The old fogies of the army and navy air forces are afraid of the amateurs and use their influence in having the postoffice authorities impose impossible and vexatious restrictions that limit the field."

DOINGS IN SOCIETY

CLUB CALENDAR

Thursday

Auction Bridge—Miss Madge Hite.

Evangelical Ladies' Aid Society—At Church Parlors.

The Tri Kappa meeting scheduled for next Tuesday, July 25th has been postponed indefinitely. Members please take notice.

The Psi Iota Xi sorority will furnish a room in the County Hospital. This was decided at the regular meeting last night held at the home of Mrs. Faye Smith Knapp. It was also decided that they would conduct a stand at the Fair and would handle watermelons. At their annual initiation held recently the following were initiated into membership: Helen Swearenger, Dora Marie Magley, Fan Hammell, Mrs. John Baumgartner and Mrs. A. R. Holthouse.

Mrs. R. J. Holthouse, Mrs. Arthur Holthouse, Mrs. Charles Voglewede, and Mrs. Bernard Terveer will entertain a number of invited guests at a dinner party this evening at the home of Mrs. R. J. Holthouse on West Madison street.

Mr. and Mrs. William Shoaf entertained Sunday in honor of her nieces, Miss Alta Benedict and Mrs. Cora Kahlert and daughter and son, Merilynn and Edwin, from Oak Harbor, Ohio. The following guests were there: Mrs. Cora Kahlert and son and daughter, Edwin and Merilynn; Miss Alta Benedict, Mr. and Mrs. Frank Liniger and son, Vaun, of Ft. Wayne, Mr. and Mrs. F. D. Shoaf and son, Junior, of Ft. Wayne; Mr. and Mrs. Noah Egley and daughters, Deloris, Ireta and Milita; Mr. and Mrs. Tris Perkins, of Blucton; Mr. and Mrs. Charles Shoaf, of near Monroe; Mr. Wayne Wagner, Frank Shoaf, Miss Ireta Shoaf, Miss Mae Shoaf. The afternoon was spent in taking pic- and listening to music.

W. W. Briggs, postmaster at Geneva, was a visitor in this city this afternoon.

BUSICK FUNERAL AT 2 P. M., FRIDAY

Funeral Services for Fred Busick to Be Held From St. Peters Church

Funeral services for Fred Busick, prominent Root township farmer who died yesterday, will be held from the St. Peters Lutheran church at 2 p. m. Friday. Burial will be held in the St. Peters cemetery.

Mr. Busick suffered a stroke of paralysis about two weeks ago and has been unable to talk since that time. He has been in a very serious condition but seemed to be feeling as well as common yesterday morning. He grew worse suddenly and died shortly after eating his dinner yesterday.

The deceased was born in Root township near the scene of his death, on October 18, 1843, being 79 years old at the time of his death. His parents came to America from Germany three months before his birth. Mr. Busick's wife died on January 3, 1904. Since that time he has been living on the home place with his son Edward. Seven children survive. They are Henry, of Michigan; and William, August, Frederick, Edward, Theodore, and Mrs. Ernest Fuelling, all of this county.

DIVORCE CASE BEING HEARD IN ADAMS CIRCUIT COURT TODAY

The divorce case of Frank Spillner against Rosella Spillner, venued to Adams county from the Allen Superior court, was begun in the local court this morning. The divorce is being contested by Mrs. Spillner. The plaintiff claimed that his wife placed their children in an orphan's home without his sanction or knowledge and that she spent money, which he gave to her for the children's support, for her own pleasure.

KINGS DAUGHTERS CLASS OF THE UNITED BRETHREN CHURCH HELD A PICNIC

The Kings Daughters Sunday School class of the United Brethren church with their teacher, Mrs. C. J. Miner, had an exceedingly fine time picnicking on the church lawn last evening. The eats consisted of cake, pickles, buns, bananas, noodles, baked beans and roasted weiners. There was a little social time after eating was over and each girl gave a pledge of one dollar to be raised within sixty days for the building fund.