

## Portland Electric Power Company Lines

Three Hundred Services During Year Require Erection of Sixteen Miles of Line—Reach Many Farms—Farmers Stand Part of Expense

An octopus may branch out into eight directions, but at that it is still far behind the P. E. P. Co., whose power lines radiate in 11 different directions from Salem. These 11 lines extend out the north river road, the Wallace road, the Hall's Ferry road, Liberty road, Garden road, Silverton road, Turner road, Jefferson road, Pacific highway north, penitentiary road district, asylum road district, and the Morningside district. These lines supply 350 customers, and their total mileage approximates 40 miles.

**Farmers Stand Part of Expense**  
The estimated cost of the erection of a mile of line is \$1200. The company feels that it is justified in expending \$60 in the installation of each new service. Therefore if there are 10 customers to be served from one mile of line, the company stands \$600 of the expense of erection and the farmers to be served divide the balance of the expense among them. They each then have a \$60 investment in the line, which is refunded by the company as new customers are added. There is a rural charge made over the regular city rate for service of 60 cents per month.

**5,535 Services Rendered**  
There have been approximately 300 new services added in the last year, for which it has been necessary to erect 16 miles of line. The company maintains a crew of 16 men the year round who attend to the installation and maintenance of services. The number of services now rendered totals 5,535, counting homes, hotels and rural customers.

**Maintain Gas Plant in Salem**  
The P. E. P. Co. also maintains a gas manufacturing plant in Salem and supplies 1425 customers with this service. The manufacture of this gas is a very interesting and complicated process. It is obtained from bituminous coal. The plant uses a car load of coal every five days, or an average of 10 tons daily. This coal is put into benches and roasted for eight hours, after which it is taken out in the form of coke. Each bench consists of a set of six ovens. These ovens are absolutely airtight except for one opening

through which the gas ascends into tanks above the benches. Of course since the ovens are airtight the coal does not burn but the coke which is taken out of the ovens is used in the manufacture of a producing gas which supplies the heat for the ovens. This producing gas is not sold to the public. Each one of the 24 ovens in the plant holds 450 pounds of coal. It is an interesting fact that one ton of the coke removed from the ovens contains more heating power than a ton of coal. It should be added however that there is obtained from each ton of coal only 1100 pounds of coke. The chemical content of the coal used averages about 83% carbon, 4% volatile material, and seven per cent ash. The gas is obtained from the volatile material.

**Crude Gas Must be Purified**  
The gas when it comes from the benches is in a very crude state and must be thoroughly purified before it is marketable. First it is forced through a series of little holes and against plates upon which the tar content is caught and runs down, allowing the gas to continue on its way. After the

gas comes out of the tar removing process it goes into another tank where it is cooled and condensed and the ammonia extracted. The gas then proceeds into another tank where the sulphurated hydrogen is taken out. Upon the completion of this operation the gas is conducted into a set of purifying boxes where it receives the last process in its purification. In these boxes the sulphur content becomes attached to a compound containing chips, and lime and other ingredients which have combined to form a rust in the boxes. The gas in its pure form is then conveyed to tanks from which it is distributed about the city.

**Gas Tanks Telescopic in Nature**  
These tanks are telescopic in nature. When the gas in the tank is contracted or expanded by excessive heat as the case may be the tank closes up or opens very much like a telescope. As a rule however the temperature in the tanks is fairly equable. Due to the amount of gas consumed during the day by the public, the tanks are generally nearly empty at night, but by morning they have had time to refill.

## The Hillman Fuel Company

Dealers in Utah, Rock Springs, Blacksmith and Oregon Coal—Also Carry All Kinds of Wood

The Hillman Fuel company, operated by the Hillman Brothers, is forging the front as a new fuel business in Salem. It is operated by Otto and G. A. Hillman, brothers, and located on Broadway at Hood street.

The firm was established in October of last year and is practically 14 months old. During that time they have built up a good business, dealing in wood and coal, specializing in coal. They carry Utah, Rock Springs, Blacksmith, and Oregon coal.

The firm has direct connection with the Oregon Electric railroad by a spur which runs directly into their yard. This gives them facilities to handle three cars at a time. This also includes the facilities for wood and coal.

Paved streets connect the yard to all parts of the city. There is an entrance on Hood and one on Broadway. This gives them great advantage in reaching the consumer.

The brothers are operating two trucks of one and one and one-half tons capacity. Additional trucks are added to the fleet when necessary when the demand arises.

The Hillman Brothers is the only firm in Salem specializing in coal. They have found that the demand for this product is increasing steadily in the city and consequently they are preparing to meet this demand.

According to Hillman Bros., Salem is not using the quantity of coal that she should. The per

capita amount is far below the average of other cities.

The reason for this, they state, lies in the fact that Salem has been surrounded by second growth forests, consequently the consumer can secure fuel at a very low price.

The supply, however, has been decreasing each year and during the last five years the demand has increased many times and the supply has decreased accordingly. The price for wood has gone up and in the meantime the price of coal has been going down.

The wood which the Hillman Fuel company handles consists of old fir, second growth, and oak. They have on hand several hundred cords of the old fir, although the supply nearby Salem is not as plentiful as it should be. The supply has practically disappeared and the cost of transporting it from the mountains to Salem is prohibitive.

This wood can be secured in varying sizes from the customary stove length to four-foot lengths. It is delivered to the consumer.

One thing that the brothers have found in their pioneering work of introducing coal to Salem is that many people try to burn wood in coal furnaces. This is a failure and improper results are secured.

The brothers are authorities on the question of fuel and any information that they can give to customers or prospective customers will be given gladly.

Since coal is the specialty of the Hillman Fuel company they are well equipped to handle it. They have storage bins which will hold about 360 tons of coal. These storage bins are divided into six compartments.

They are equipped to handle lump coal of different kinds and varying sizes. They have coal for every purpose. They have coal in egg sizes for cook stoves and they have it in lumps several pounds in weight.

These storage bins can handle about twenty cars of coal.

Most of the coal which is sold by the firm is produced in Utah, and the Oregon coal is produced in the Marshfield district. It is of a poor quality, however, and is mixed with slack of a better grade of coal before being shipped to the consumer.

The Hillman brothers have one added feature to their business which is proving a blessing and a money-saver to those who have large buildings to heat. This is the Automatic Fireman.

It is a stoker which feeds the furnace and maintains a steady, given temperature.

## Lloyd A. Lee's Hatchery and Poultry Farm

Oregon's Most Modern Hatchery—Capacity Sixty Thousand Eggs—Twenty Thousand Eggs Per Week—Hatching Eggs and Baby Chicks

Lloyd A. Lee, proprietor of the Lloyd A. Lee Hatchery and Poultry Farm, just a few miles east of Salem on the Fruitland Road, is preparing to do big things in the hatchery business.

He announces that he expects to produce from 125,000 to 150,000 baby chicks during the coming season, and that he has on his farm hatching facilities to easily handle this big number of birds.

While this number may seem large to those not familiar with the chick business, Mr. Lee has some standing orders for 2,000 chicks a week for a 10 week period, and this with his rapidly developing business, assures him



Lloyd A. Lee

that his hatch the coming season will easily reach 125,000 chicks.

Mr. Lee has installed recently a Smith Mammoth Incubator of 47,000 egg capacity which is the largest incubator manufactured for commercial use. This machine which is 10 feet wide, 13 feet long and eight feet high, has the appearance from the outside of a large refrigerator. It consists of a room with 288 trays hanging on chains on either side of a center aisle. The operator in attending the eggs and chicks works inside the machine. This incubator has the most rapid and complete change of air of any on the market today. Four electric fans in the ceiling completely

change the air every three minutes.

The Smith incubator, which accommodates more eggs in less floor space than any incubator made, has several other exclusive features. While it is heated by steam from a boiler outside the machine, it also has a cooling system which may be used in emergency to prevent overheating in hot weather. This consists of a series of pipes through which cold water may be run. Moisture is supplied in the form of live steam which the fans diffuse and circulate throughout the incubator.

Also there is a recording instrument which gives a complete record of the temperature during the whole incubating period, while the eggs are turned automatically with positively no breakage.

Last year Mr. Lee installed a large 10,000 egg capacity Wis-

bone Mammoth, which was operated with perfect satisfaction and crowded to full capacity during the entire season.

This machine together with the several smaller Master incubators, all of which will be operated again the coming season, turned out approximately 40,000 chicks. Much of the work done was custom hatching and the waiting list of those desiring eggs hatched, made it necessary for Mr. Lee to install the larger machine this year.

Mr. Lee's plant can now easily handle 20,000 eggs per week and will be able to supply baby chicks of quality from flocks of known vitality and heavy production as well as to accommodate a larger custom hatching business which is growing each year. In fact, the big hatching business is rapidly putting the motherly hen out of business.

Mr. Lee believes that having facilities for doing this amount of business is of distinct value to the Salem trading area, as it will afford a market for high grade hatching eggs, and will prove an incentive to the production of eggs of higher quality through better breeding methods and better care of flocks.

Mr. Lee says the value of hatching eggs is dependent upon these things, and that the producer will be able to market eggs of quality readily in large quantities which has not been possible here before.

Just at present there are few eggs of real quality of the Barred Rock and Rhode Island Red varieties. Better quality eggs means higher prices for the producer.

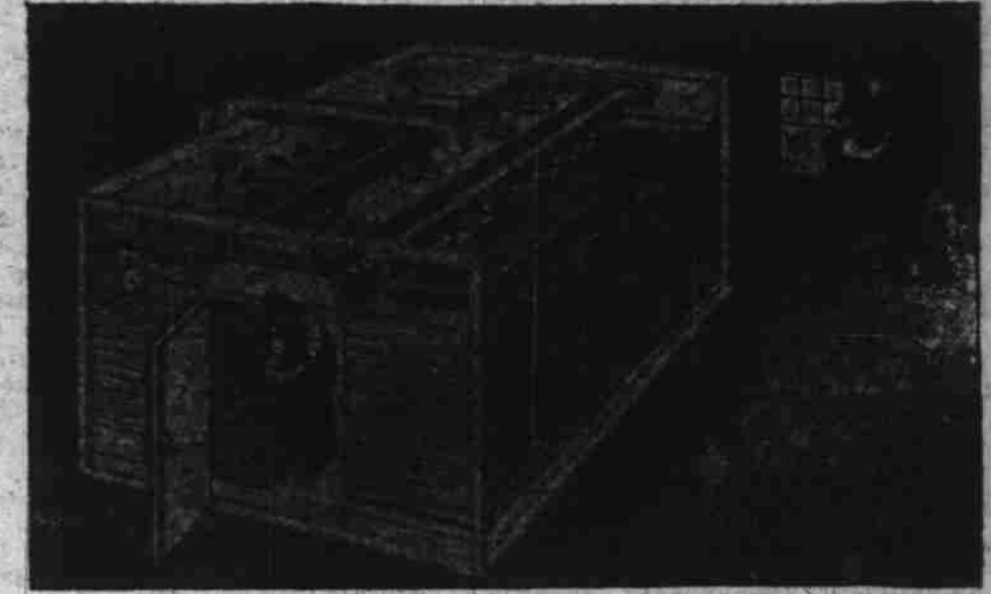
Mr. Lee will also have a brooder capacity for 6000 baby chicks. These pullets and cockerels will be used to supply the rapidly growing business along these lines.

Visitors are always welcome at the Lee Hatchery except Sundays.

The latest description of a big-ant is a man who makes the same mistake twice. — London Opinion.

## Oregon's Most Modern Hatchery

CAPACITY 60,000 EGGS—20,000 PER WEEK



Custom Hatching  
Leghorn  
Pullets

Hatching Eggs  
Baby Chicks

Our New 47,000 Egg Smith Incubator

MANY DATES FILLED. PLACE YOUR ORDERS NOW  
CUSTOM HATCHING OUR SPECIALTY

Lloyd A. Lee Hatchery and Poultry Farm

Route 6 Box 115

Visitors Welcome Except Sundays

Phone 32F21

# Our Three Great Families

### 75,000 LIGHT AND POWER CUSTOMERS

IN our family of light and power customers there are over 75,000 members. It is not only a large family but it is growing rapidly because every day more people are coming to realize that electric service is indispensable to modern life, that it is essential to comfort, happiness in the home, to efficiency, economy and convenience in the store, office and factory.

To this mighty family of ours—scattered over an area of over 800 square miles and residing in more than 50 different communities—we are providing an essential service 24 hours in the day, 7 days in the week and 12 months in the year.

Moreover, this service is on tap—ready to perform its manifold duties by merely touching a button or snapping a switch.

Behind this great labor, time and money-saving convenience are tens of millions of dollars of invested capital, 10 great power plants, thousands of miles of transmission and distribution lines, a net-work of sub-stations, and vast batteries of motors and machinery.

Every time you turn on a light or run a motor you call into play the vast outlay of equipment, and the vital man power behind it. This is real service—reliable service—at your service, night and day, all the year round.

### 250,000 DAILY CAR RIDERS

OUR largest and most interesting family are our daily car riders—250,000 of them!

Can you imagine what a man-sized job it must be to provide safe, rapid and comfortable service to such an army of people, as that every day? Yet we do it and we believe we are doing it well.

We have 615 passenger cars in use on our 32 city street car lines and interurban system, and we operate approximately 300 miles of track to care for this great family, so widely scattered through the urban, suburban and interurban business and residential districts served by us.

We have approximately 1600 employes in our transportation department, all of them imbued with the idea that their first and greatest obligation is to give the traveling public the best and most satisfactory service possible.

Besides our electric railway service, we are operating a new and modern motor bus service on our 39th street line to take care of the needs of a rapidly growing and populous district on the East Side.

We are also operating a modern interurban stage service between Portland and Oregon City on the west side of the river, which supplements our rapid transit trolley service between these cities on the east side of the river.

### 5,000 SECURITY HOLDERS IN OREGON

OUR third family, composed of our 5000 investors in our company securities, might well be called our "Thrift Family." They have put some of their earnings and savings to work where they will bring in a satisfactory rate of interest regularly.

Also, the members of this great family are profit-sharing partners in this great industrial institution—the largest public utility enterprise in Oregon.

They know their money is safe because they can watch it work for them right here at home, and they know they have an assured income for back of their investment in our securities are a vast group of physical properties representing a capital investment of over \$70,000,000, which is supplying essential service, light, power and transportation to a population of 350,000 people, living in 50 or more communities. So that as these communities thrive and prosper our "Thrift Family" is likewise bound to reap attractive dividends from their holdings.

This company has expended \$12,000,000 in new construction and improvements in the last two years, and its annual payroll is over \$6,000,000 distributed to another one of our important "families"—our 3500 employes, nearly 50% of whom are company share-holders.

Most of this money is spent right here at home.

## A Good Investment

OUR SECURITIES ARE A GOOD INVESTMENT BECAUSE:

1. Your income will be regular and dependable and your savings will be safe.
2. Dividends paid by check each month or quarterly, as you prefer.
3. Dividends exempt from Oregon personal property tax and normal Federal Income tax.
4. Our business is firmly established, well managed and permanent.
5. These shares yield 7.20 per cent. Price \$100 a share. Easy terms if desired.

## Investment Department, Portland Electric Power Company, Salem, Oregon.

Gentlemen:

Please send me without obligation to myself full information about your profit-sharing, easy-payment and monthly-savings investment plan.

Name .....

Address .....

P. O. ....

State .....

# PORTLAND ELECTRIC POWER COMPANY

PORTLAND

SALEM

OREGON CITY

VANCOUVER, WASH.