

Radio Rapidly Becoming Modern Necessity

Frank S. Barton, of the Salem Electric Company, Discourses on Radio and Its Wonderful Development—"If It's Electric" They Have It

No recent scientific investigation and discovery has captured, or captivated, man's earnest desire more than the radio. It has fascinated more people with its wonders than any other of the wonderful developments of the modern world. For this reason public interest is centered intensely upon every source of authentic information regarding this wonderful subject. It is essential a subject which "A little learning is a dangerous thing." The Statesman in its desire to gratify the public appetite for authentic information called upon Frank S. Barton, proprietor of the Salem Electric Company, for a statement as to the present and future of radio. Mr. Barton is one of the highest authorities on radio to be found in this country. The publication "Who's Who in Engineering" has this to say regarding Mr. Barton:

"Born in Nunda, N. Y., Jan. 17, 1879; educated in the common schools of Manchester, Va., Randolph-Macon Academy, Electrical Engineer; Syracuse University in 1900; married at Saranac Lake, N. Y., April 6, 1906, to Clara Virginia McClelland. In 1904 was employed as an engine designer by the Westinghouse Electric & Manufacturing Co., N. Y., was station operator for Utica & Mohawk R. R., 1905-6; in test department of General Electric Company 1906-11; in charge of full load turbine testing 1909-11; chief electrician for Electric Coal & Lumber Co., 1911; superintendent survey department, engineering layout, records, maps, reports, etc., N. Y. & Queens Electric Light & Power Co., 1912; senior and manager of Salem Electric Company since 1914. Mr. Barton tested the first synchronous generator, first interpole motor, first 20,000-kilowatt turbo alternator; first large sized horizontal turbine, first large size high speed turbine for the General Electric Corp. He is also the author of several books on electrical engineering, among them being "Testing Turbines," "Full Load and No Load Testing of Alternating Current Generators."

From the above it will be safe to conclude that when Mr. Barton speaks on electrical subjects he speaks with authority of one who knows.

Asked as to the present radio situation and its outlook for the immediate future Mr. Barton said that at the recent convention of radio workers held in San Francisco, Cal., it was the consensus of opinion that no radical changes were likely to take place, at least not soon. He said that many people who were anxious to install a radio were hesitating for fear of radical changes in the near future making their outfit obsolete. He thinks that only minor changes in a few details are likely; that probably the battery will be dispensed with and the current obtained from a light socket; that there will be no visible horn and the number of knobs reduced to one or two; that the serial will be

dispensed with also. All changes will be towards simplicity and none of them will affect the practical working of the present machines. He is of the opinion that within the next five years we will broadcast moving pictures, much as music is now broadcast. We will then not only hear a ball game but be able to see what is going on. This feature has already been made a laboratory success but has not yet developed sufficiently as to be a commercial possibility. Such an apparatus simply converts light waves into radio waves and re-converts them into vibrations of light waves just as we convert sound waves into radio and back to sound waves.

Mr. Barton states that last spring he had what radio men call a "freak station." It was broadcasting station KPCC. He used a small instrument of his own make but it was heard all over the United States. It was a 5 watt instrument. To get a better idea of the small size, an ordinary light bulb uses a 60 watt current and the smallest lamp made is a 10 watt. The big station of the Oregonian, in Portland, uses 500 watts. Mr. Barton has a letter from Mr. Stubbs, of Rochester, N. Y., stating he had received KPCC messages loud and clear, in fact better than from any other Pacific coast station. Theoretically his small machine had a radius of but 100 miles. This small set was a home-made affair while the Oregonian set is from the Western Electric Co.

Mr. Barton says that the radio has now entered so firmly into the life of Americans that in the near future it will be ranked as among the necessities of life much as the automobile has become a necessity. He says that the war gave a great impetus to radio development. Each side put forth a mighty effort to "jam" the air for the enemy and the genius of the world was exerted to devise methods for penetrating the "jam" of the enemy without interrupting their own side to interruptions. Major Armstrong, of the United States, who developed the famous regenerative set, developed what is known as a "super-heterodyne" for the United States and the present set of instruments now offered by the Radio Corporation of America is of this type and was designed by Major Armstrong. It will work as well with a loop as with an aerial.

An interesting application of radio in practical affairs was given by Mr. Barton. It was during the high flood condition of the Willamette. The railroads, telegraph and telephone lines were out of commission. The river was running almost over the Polk county bridge. It was essential that Oregon Electric communicate with Albany. The telephone lines were repaired and tested the lines and found it all right but still no message could be passed over it. They decided that the Albany of

is affiliated the Washougal mill at Washougal, Wash.; Bend, Brownville, the Santiam at Santiam, the Kay mill at Salem, the Koppie mill at Eugene, the Jacobs mill at Oregon City, the Oregon Worsted in Sellwood, a suburb, and the Portland mill in St. Johns, a suburb. Sales headquarters and warehouses are maintained in Portland for the Pendleton mill, producers of the famous "Pendleton" blanket, the Santiam mill and the Oregon City Mfg. Co. The Oregon City company operates a tailoring factory in Portland employing 200 operatives. Besides the sales headquarters and warehouses, the Pendleton mill has a tailoring department for the production of shirts and other garments. Important developments are soon expected in plans for expansion of garment manufacturing operations at the Santiam mill.

Oregon City is the most important manufacturing center outside of Portland. Here paper mills and woolen industries contribute very large revenues to the state's income. Astoria is headquarters of the salmon packing industries, boat building, the making of fish oil and foundry products being important. The Dalles has important industries, chief of which is the Libby McNeill & Libby cannery, which is a huge supply depot for food products. The Hood River Apple Vinegar Co., and the Western Laboratories' various products give Hood River a good position in the manufacturing column. In Bend is found lead pencils, slats, woolen products and the great pine mills with an immense production in box shooks and 10,000 car-loads of lumber annually. Bend sends car-loads of box shooks to the middle-west and the shooks come back in boxes, carrying canned foods for the consumption of central Oregon wage-earners.

Pendleton is noted for its well-known woolen mill products and for the manufacture of saddlery and harness equipment, a plant there being well-known to the cowboy world for equipment that a cowboy most likes. Baker manufactures overalls, calendars, box shooks, some farm machinery and various foundry products. Near Baker are cement and lime mills. Salem has important packing industries whose brands are known in the country over, woolen mills and wood-working plants. She also has an important meat packing industry and this ensuing year will see the advent of the linen industry in the state capital. Albany makes furniture and packs meat.

Eugene produces tool handles, excelsior, furniture, wheel-barrrows, step-ladders, cedar chests, cement products, cereals, woolen blankets, that are distributed afar. Silverton manufactures package cereals that enjoy a good local trade. Newberg has an important tool manufacturing, also big canning industries. Grants Pass industries are related to products of farm and orchard. Gold Hill is the center of a big cement industry. Roseburg specializes in processing products from the soil. Medford manufactures the matchless products of the granite quarries, has several important fruit and vegetable packing factories and smaller lines. Klamath Falls is headquarters for a great interior country and manufactures many lumber products. Corvallis has large flour mill interests and canneries. Lumber and cereal mills and smaller plants give McMinnville a manufacturing air.

The Coos Bay country has shown most remarkable development within the past few years in manufacturing wood products. A pulp mill is projected in Curry county. This region is destined to experience great growth in a manufacturing way. Aside from its lumber cargoes the manufacture of cedar separators for batteries is attaining some proportions; the Port Orford cedar being found highly adaptable for use in battery manufacture. Big payrolls are supported by mills in Reedsport, North Bend, Marshfield, Coquille, Myrtle Point and Bandon.

Among the towns contributing manufactured products, which enjoy a national reputation, are Portland—for a great variety of things, machinery leading; The Dalles for canned goods, Salem for brands of prunes, Pendleton and Oregon City for woolen goods, Bandon, McMinnville and Hillsboro for nationally known brands of milk, and to a lesser extent, the town of Scio; Tillamook for much advertised cheese; Coos Bay for cheese, Curry county for cedar.

Such enumeration as this is, of course, intended to be suggestive rather than literal. There are hundreds of other industries manufacturing an astonishing variety of things and no compendium would be complete for more than a few months for the reason that manufacturing in Oregon is progressing at a very lively rate. It is a fact that Oregon could be cut off from the rest of the world and very well sustain herself for the things that she still lacks, such as iron ore, are stored in the earth and available at any time.

It is useful and profitable for Oregonians themselves to know their own Oregon and its manufactures and any recapitulation of the conclusion that the state has a rich and prosperous career industrially.

Salem is the loganberry center of the world. The industry started here. Grow from here.

Who Is Buyer?

What Are Labels on Goods in Your Home?

Who looks after most of the buying in your household? Undoubtedly the women, the home-keepers, mothers, sisters, wives.

The women are the judges and buyers of everything that enters into daily use in the household.

Have you, when deciding to make a purchase, ever considered whether your wants can be supplied from an Oregon manufacturing plant? Almost everything in normal requirements of the average home is made here in Oregon—made as good as it is made elsewhere.

Suppose you look up the labels and the marks on the goods you buy. Mrs. Housekeeper, and find out where they are made.

If you buy Oregon goods you are helping Oregon wage-earners—men and women—who appreciate steady employment, who are supporting homes, educating their children and helping sustain the community.

"Oregon Made Merits Your Trade"—on a quality basis. At your grocer's or clothing store, drug store or what-not, you will find the dealer as ready and willing to serve you with the Oregon made as with any outside made commodity. It will make a lot of difference in business and employment conditions here if you indicate a preference, whenever possible, for Oregon made goods.

The prosperity of Oregon industries reflects prosperity on us. We know that the taxes from our industries to a large extent pay for our schools and highways and the more goods the factories sell the more people employed and more wages paid. When everybody's earning wages we have "good times" in the fullest sense of the term.

If every resident of Oregon saw to it that 50 cents a day of his or her present normal expenditure went for an Oregon made product the immediate result would speed up business with—25,000 more people employed in Oregon industries; \$30,000,000.00 increase in annual payrolls of the state; \$120,000,000.00 increase in yearly output of Oregon factories.

Really, do you know of any other way to get these results for the good of our community as quickly and simply as by this cooperation in serving our own interests.

er way to get these results for the good of our community as quickly and simply as by this cooperation in serving our own interests.

also. We have black raspberry vines that have been bearing for more than 20 years, and are still bearing.

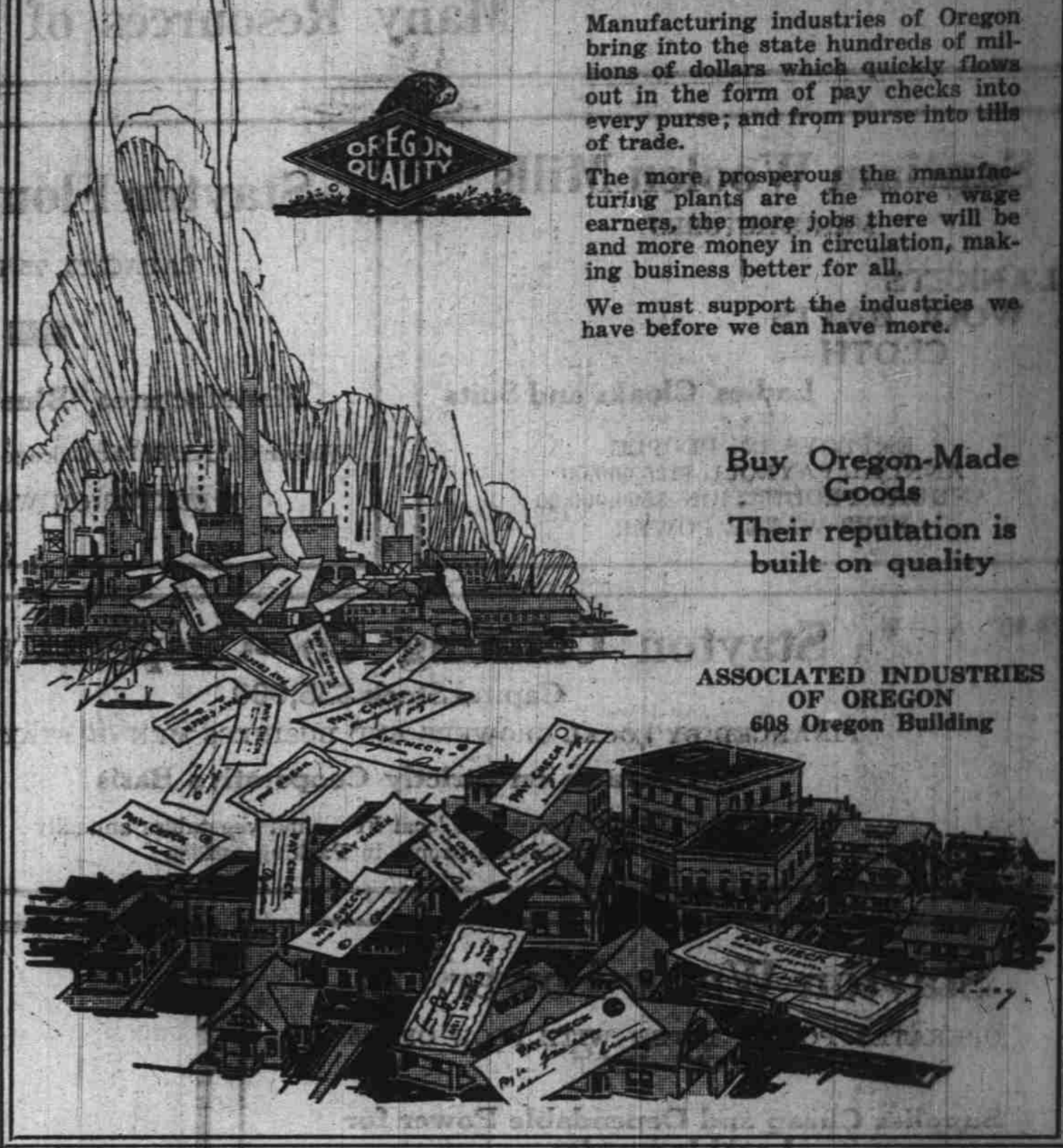
The Prune industry of the Pacific Northwest started near Salem. All the great movements to develop the industry were originated here. Salem will always be the prune center of this corner of the United States.

We best California on walnuts; or on quality that brings better prices, and on cheapness of production and low selling values of our land.

ated here. Salem will always be the prune center of this corner of the United States.

We best California on walnuts; or on quality that brings better prices, and on cheapness of production and low selling values of our land.

Manufactures Build The Wealth of the State



Manufacturing industries of Oregon bring into the state hundreds of millions of dollars which quickly flows out in the form of pay checks into every purse; and from purse into tills of trade.

The more prosperous the manufacturing plants are the more wage earners, the more jobs there will be and more money in circulation, making business better for all.

We must support the industries we have before we can have more.

Buy Oregon-Made Goods
Their reputation is built on quality

ASSOCIATED INDUSTRIES OF OREGON
608 Oregon Building

Some Things Oregon Makes and Sells World

All Parts of the State Contribute to the Grand Total of Three Hundred Million Dollars' Worth of Manufactured Products Every Year

By DAN C. FREEMAN
Manager Associated Industries of Oregon

Oregon manufacturers help feed and clothe and shelter people over a goodly part of the world.

The sketchiest of reviews of Oregon industries reflect the stupendous variety of resources which intelligent creation endowed every part of the rainbow state. The manufactured output for 1924 is in excess of three hundred million dollars and every section contributed a goodly proportion of this sum.

Industrially, Oregon is a young giant. In proportion to its population the manufacturing plants compare to get advantage with other states of the union. It is a matter of speaking to refer to our "young" industries and it is well to remember that of the total manufacturing industries all over the United States almost half are plants having five men or less.

Casual references to manufacturing in Oregon often begin with the naming of lumber and salmon and end with flour, wheat and fruit. Lumber heads the list because it employs the greatest number of people but, outside of lumber, there are two thousand producing establishments putting money into our community pocket. Most of these are in the metropolitan district, but with very good representation elsewhere in the state.

Interest in the manufacturing may not rest solely upon volume quite so much as the fact that they assist in some of the things produced. Whenever and wherever we can manufacture a little better than competing industries we are on the way to success.

People who live in Oregon—that is the mass of them—do not realize, until told, of the progress of manufacturing and what the payrolls are doing for our prosperity. Oregon manufactured

goods are, themselves, telling the world of quality in material, skill in fabrication and advantages in the matter of service and supply.

Oregon ranks as follows in manufacturing—

Thirtieth state in value of products.

Thirtieth as to number of manufacturing, classified by the federal government but the state labor bureau's estimates move it further up the column.

Sixth in canning and preserving fruits and vegetables.

Fifth in flouring and cereal mill products.

Seventeenth in woolen manufactures.

Fourth in fish canning and in blanket making and cotton warp making.

In certain ones of the groups of industries Oregon does better under the cautious and grading census enumerator's examination. The state approaches Rhode Island and closely in number of manufacturing plants but the elder state with a smaller population has three times as many wage earners as Oregon.

Relative industrial importance of the state reads more understandingly when certain facts are stated. For example, Oregon blankets, woolen goods, knitwear and clothing are sold in every state and every American possession.

There are twenty groups of manufactures which bring large revenues to the state and are either national, semi-nationally or internationally distributed and part of them are widely advertised in newspapers and magazines. These groups are named in the order of value or amount of production and, of course, do not refer to many thousands of other products not yet factors in widely known markets:

1—Lumber and lumber products, including shingles, sashes, doors, windows, panels, etc.

2—Machinery, logging locomotives, logging engines and metal products.

3—Cereals and flour.

4—Woolen products, cloth, yarn, blankets, robes, clothing.

5—Fish.

6—Paper, paper products, bags, toweling, etc.

7—Furniture, including metal furniture.

8—Factory-cut, ready-made and portable houses, buildings, including churches, barns, hospitals and garages.

9—Processed fruits and vegetables and meat packing.

10—Cheese, butter, and evaporated milk.

11—Stoves, furnaces and house heating equipment.

12—Rubber products, heels, soles, tires, tubes, snubbers, buttons.

13—Vegetable oils and fish oil.

14—Paints, varnishes, chemicals, etc.

15—Fixtures and show cases for stores, banks and business places.

16—Shoes, saddlery and leather specialties.

17—Soaps, cleaning compounds.

18—Work clothing and rain-proof clothing, canvas goods.

19—Women's clothing and women's outing suits.

20—Toilet preparations, drugs.

While Portland is the big producing center and many concerns nationally known are using this city as a center of distribution, many important industries are located over the state. These are in such groups as the iron and steel industries, furniture, fish, meat and vegetable packing, woolen mills and wood-working plants.

Furniture manufacturing is carried on in Albany, Eugene, Marshfield, Salem, Sheridan, Astoria and other cities, but the large output is in Portland, from which forty carloads a week go to the trade. Woolen mills are located at Pendleton (with which

AT YOUR SERVICE OUR DEPARTMENTS

- 1. Radio.** We are constantly trying out new sets—culling out the poor and offering you the best. We give you the result of our years of experience. A full line of parts. Advice gladly given.
- 2. Fixtures.** We have designed and built fixtures for some of the best homes in Salem. We do not just hang up pieces haphazard but we study your color scheme and general arrangement and build original fixtures to harmonize with your interior. Yes, we handle low-priced fixtures—as low as you like.
- 3. Wiring.** We have five high-class men who know their business. You can depend on them. Our prices are as low as is consistent with good material and workmanship. Get our figures—you will find them interesting—no job too large—no job too small.
- 4. Merchandise.** Our line of general electrical merchandise is always high class and of the best. We guarantee everything and our goal is to please you. The prices are right—come and see for yourself.
- 5. Labor Savers.** This line embraces washers, ironers, sweepers and the like. We have tried many many makes and we offer you the best. Give us a chance to prove our statement.
- 6. Mazda Lamps.** We handle the famous Westinghouse Mazda Lamps. None better.

"If it's electric, come to us"

SALEM ELECTRIC CO.

F. S. Barton, Prop.

Masonic Temple

Phone 1200