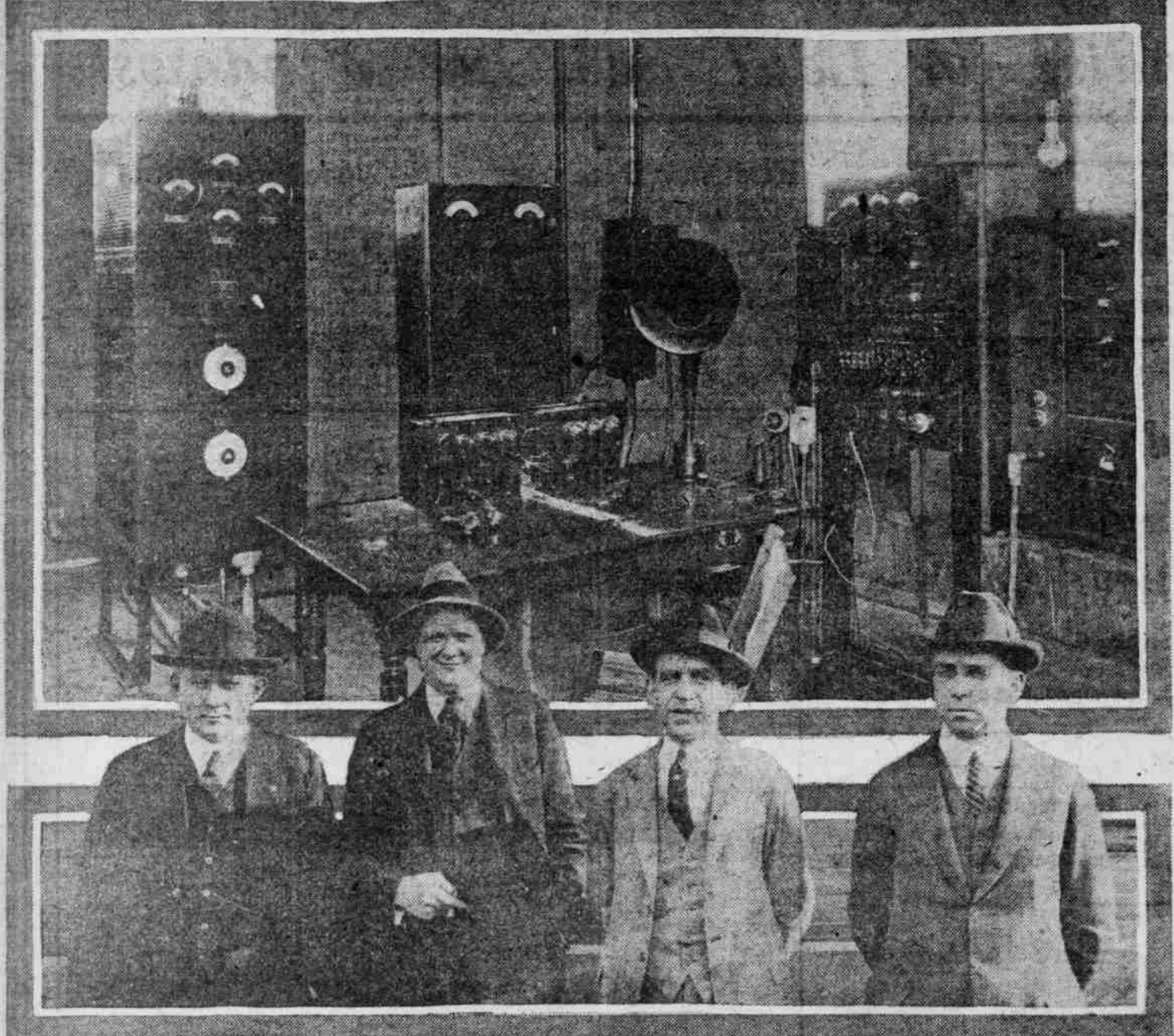


# THE OREGONIAN'S POWERFUL NEW RADIO BROADCASTING PLANT IS COMPLETED AND READY TO SERVE 100,000 FANS

Giant Station Is Unequaled by Any on Coast Except One—Large Grand Concert Piano Is Hoisted Into Special Room on Eleventh Floor of Building and Everything Is Put in Readiness for Start of Regular Amusement Schedule Tomorrow Night.



Upper picture shows transmitter, power panels, controls, testing loud-speaker and other apparatus of new broadcasting set in The Oregonian tower. Below are O. R. Redfern, federal radio inspector of the seventh district; A. M. McMillan, P. H. Evans and N. Levinson, radio experts of the Western Electric company.

(Continued From First Page.)  
Within a radius of 100 miles will be able to hear The Oregonian station whenever it is working, and the normal broadcasting radius of the powerful apparatus is 1500 miles. A station exactly like this one in St. Louis was heard by operators in 48 states and by ships in the Atlantic and Pacific oceans and the Gulf of Mexico on the same night, the furthest station receiving the messages being more than 3000 miles from the broadcasting station.

### New License Is Granted.

The guarantee that all stations within 400 miles will be able to receive from The Oregonian at all times means that there will be no more pockets or districts to which the radio cannot penetrate, such as have been experienced in the work of all smaller broadcasting stations in this region. Mineral deposits and permanent static conditions have prevented many communities from hearing Portland stations, the radio waves being absorbed or interfered with. When the first tests proved satisfactory, the experts declared that no more similar trouble will be experienced.

### Inspector Redfern Grants License.

O. R. Redfern, government radio inspector for the seventh district, came to Portland yesterday to pass on The Oregonian's new station. He said after he had granted the new license that it was by far the best-equipped station in the district and that Portland should be proud to have such a broadcasting tower as The Oregonian's.

### 400-Meter Wave Allowed.

Mr. Redfern granted the new class B license without any hesitancy. This license permits The Oregonian to broadcast on a wave length of 400 meters and specifies that only that wave length will be used. The regular broadcast frequency for class B stations is 360 meters. On a class B license The Oregonian is permitted to broadcast at any time of the day or night, regardless of whether any other station is broadcasting. In case two stations are broadcasting at the same time either can be heard on selective types of receiving sets.

The license further specifies that such a station provide only the very best available music and entertainment, and this is strictly in accord with the policy under which The Oregonian will conduct its radio service. Whether it is news, music, lectures or any kind of informative or entertaining material, only the best that can be obtained will be used.

### Schedule for Day Broadcasting.

The schedule for day broadcasting has not yet been definitely arranged, but beginning with tomorrow night The Oregonian will conduct a schedule of musical entertainment on the same hours that were used for the old station. Concerts of different kinds will be broadcast on Monday, Wednesday, Friday and Sunday nights. The regular service, although the final adjusting probably will not be completed, will begin tomorrow night with a concert by the Telephone male quartet, one of the best of its kind in the Pacific northwest. This quartet consists of Hal Young, first tenor; Denton Denman, second tenor; Ferris Abbott, baritone, and Mark Daniels, bass, with Miss Ruby Lloyd as accompanist. Each of the four singers is of solo quality, and the programme will include both quartet and solo numbers.

### Only One Coast Set Is Equal.

Only one other station on the Pacific coast is as large as The Oregonian's, and it is located in Los Angeles and is of the same type and make. Portland operators have been hearing the Los Angeles station regularly and with no difficulty whatsoever since it was opened about two weeks ago. The Oregonian's station is in fact one of the largest in the whole country. It is what is known as a 50-watt set, which is ten times as powerful as the set formerly used by The Oregonian and other sets now in use in Portland.

### Local Musicians Pleased.

Local musicians who have already seen the broadcasting studio on the eleventh floor expressed themselves completely enraptured with it. This chamber is entirely sound-proof. The walls and ceiling were first covered with a thickness of specially-prepared padding, and over this have been hung artistic draperies. The thickest and softest carpets available covers the floor. In one corner stands the large concert grand piano and the rest of the room is empty save for heavily upholstered chairs for the use of the artists between numbers. The only radio apparatus in this studio is the delicate microphone which stands on a pedestal beside the piano and which is connected with the broadcasting set upstairs. This microphone is so delicate that even a whisper or the soft closing of a door can be heard by radio and a special signal light is necessary to warn all occupants of the room to keep perfectly quiet while a concert is progressing.

### Reception Room Special One.

A special reception room for contesting artists has been arranged in the floor below. This is the first floor of the tower. The new broadcasting station, consequently, is a four-story affair, each of the four floors being an important part in the broadcasting of entertainment. The apparatus, which was delayed in transit, arrived in Portland late Thursday night. All of the preliminary work had been completed before that time. The antenna had been erected and the power plant installed. Three experts from the Western Electric company came to Portland at the same time. These are P. H. Evans, N. Levinson and A. M. McMillan, and they, with The Oregonian's own staff of operators, consisting of four men, headed by A. W. Cochran, with Vern Haymaker, technical expert, set to work immediately installing the equipment. These seven men worked nearly all night Thursday and Friday, with the result that they were able to make the first tests yesterday afternoon.

The Oregonian took the air during the afternoon only for a few minutes. At the time a small station was broadcasting. Coming without warning or an opportunity for listeners to adjust their sets, the powerful new station drowned the other out with an effect similar to snuffing out a candle. As soon as listeners realized what was going on, they at once began experimenting on adjusting their receiving sets to other stations, and reports received from a number of operators proved that The Oregonian station is so finely adjusted and tuned to exactly the right wave length that adjustment is easily possible to either station.

Inspector Redfern, after receiving these reports, went out himself to different receiving stations to tune from one broadcasting station to another, in order to satisfy himself that it will be possible for listeners to hear both stations by merely making a simple adjustment.

### Schedule Starts Tomorrow.

Except for the tests made yesterday and last night, no music will now be broadcast until tomorrow night when the regular schedule will go into effect. The formal dedication of the station will be held sometime within the next two weeks.

Along with the outside tests, experiments in modulating and adjusting to different kinds of music were made in the studio. Max Dearborn Schwab, soprano and the first local singer to take up radio singing, used her voice in all its range and every note and bit of shading was carried to the amplifier in perfect tone. The piano, always so difficult to broadcast, could be heard as though it were in the same room with the listener, and other kinds of music were just as successfully transmitted.

### Circus to Aid Portland.

#### AL KADER WILL ADVERTISE CITY AT CONVENTION.

Every person who attends the indoor circus and Arabian fetes to be held at the auditorium December 4 to 14, inclusive, by Al Kader temple of the Mystic Shrine will aid in "selling Portland to the world," declared Hal T. Hutchinson, director-general of the circus, yesterday.

### RADIO SHOW ENTHUSES FANS.

Amateurs, Schools and Community Clubs Interested.

### Minister Dies at Funeral.

### Aid Promised Marion Growers.

### Plum Hunters Are Busy.

### Bend Budget Session Set.

### Snopflifer Fined \$25.

### Young Men Face Trial.

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# The World's Best Makes Included in Our 10-Days' Sale of Used Phonographs

## At a Fraction of Their Original Cost

We have marked all of these used phonographs at low, quick-disposal prices, as we must sell them within the next 10 days to make room for our incoming holiday stock.

*Victrolas—Sonoras—Edisons—Columbias*  
and many other well-known makes—in all the popular finishes

The Instruments listed below are a fair example of the bargains we are offering

Victrola, mahogany  
Perfect condition.  
Originally \$125.  
Sale price..... **\$75<sup>50</sup>**

Edison Laboratory, mahogany.  
Looks and is as good as new.  
Originally \$295.  
Sale price..... **\$160<sup>00</sup>**

Sonora Baby Grand, mahogany.  
Used only a short time. Original price \$200.  
Sale price..... **\$115<sup>50</sup>**

The majority of the instruments featured in this sale were taken in exchange on new Bush & Lane Phonographs and bear the names of the world's best makes. A fine selection of slightly used phonographs, all in perfect working order.

Columbia E. 2, mahogany. Slightly used. Original price \$85.  
Sale price..... **\$55<sup>50</sup>**

Columbia E. 2, walnut. Can't tell from new and in perfect condition. Original price \$85.  
Sale price..... **\$55<sup>00</sup>**

Victrola X, mahogany. Used two months. As good as the day it was bought. Original price \$125.  
Sale price..... **\$85<sup>50</sup>**

### See—Hear—Examine—At Once

Don't wait until the last minute to take advantage of this opportunity. You will want a phonograph sooner or later and the sooner you come in the greater will be the number from which you may choose.

We Make Ownership a Simple Matter  
Easy Terms—No Interest

# Bush & Lane Piano Co.

Everything Pertaining to Music  
"It Does Make a Difference Where You Buy Your Phonograph"

Broadway at Alder

Bush & Lane Building

### Plum Hunters Are Busy.

Being elected governor will not be half so strenuous as dealing with applicants for political patronage, and although Governor-elect Pierce is remaining at La Grande, he is not escaping importunities for jobs. A group of citizens of Tillamook county have demanded that a highway commissioner be appointed from that

### Snopflifer Fined \$25.

Mrs. Nathan Richeinstein, arrested yesterday in the Meier & Frank company store for the theft of a

### Young Men Face Trial.

SALEM, Or., Nov. 18.—(Special.)—Wayne Dimick, 22, and Ernest Crabtree, 23, who were arrested in Portland recently charged with holdups

### Robberies in Different Parts of the State.

Dimick and Crabtree have confessed, officers said, to holding up and robbing Charles Miller, a local streetcar conductor, last month. Their operations here netted them only \$7. It was said today that Miller had identified Crabtree and Dimick as the men who relieved him of the money. Both Crabtree and Dimick are members of pioneer Oregon families.

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# PHILLIPS SHOE CO.

325 Washington St. —IS— 325 Washington St.

## RETIRING FROM BUSINESS

(Closed Monday)

# Sale Starts Tuesday Morning!

Our lease expires December 31, 1922. We can find no location in which to continue our policy of better shoes for less money, and rather than sacrifice this we are closing out, after 18 years of business in Portland. We offer you a last big opportunity to save money.

We will dispose of our entire stock of men's and women's new fall and winter shoes at a price sufficiently low to sell them in the short time left to us.

Unable to quote prices at the present time, we advise you to watch our windows and visit the store, as you are sure to be pleased.

At this time we wish to thank the public of Portland and vicinity for its kind patronage, which has enabled us to complete 18 years of successful business.

Very respectfully,  
PHILLIPS SHOE COMPANY.



## \$10 for the Set

OF 3 FIXTURES PICTURED BELOW

This stock will undoubtedly be exhausted in a few days, so it behooves you to hurry.

These sets are reserved for home owners and builders only and will not be sold to dealers.

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Cut to 35c.

You Will Find Here the Most Complete and Finest Selection.

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