

SEVENTY-FOURTH YEAR

SALEM, OREGON, SUNDAY MORNING, DECEMBER 14, 1924

IRON FIREMAN APPEARS HERE

Automatic Stoker Introduced at New Salem By Hillman Fuel Company

"The Iron Fireman" is the name given to an automatic stoker that is being introduced to Salem by the Hillman Fuel company. Already the stoker is in operation at Salem and several contracts have been signed to install it in additional buildings.

The stoker is designed to give steady, uniform heat in furnaces by efficiently burning low-priced slack coal. It is automatically controlled and makes it possible to produce more heat than is possible by hand firing.

The stoker is automatic, feeds the furnace quietly, efficiently, maintaining any desired temperature by thermostatic control. It is a stoker that is used wherever heating costs must be cut to the minimum.

The fireman consists of a hopper, which is filled with slack coal, practically 30 per cent of the output of mines, according to statistics.

This slack coal after it is placed in the hopper of the stoker is carried by a worm which forces the coal onto the burning area of the furnace. An electric motor, which controls the worm, also controls an electric fan. This forces air into the boiler up through the coal as it is wormed into the fire. The stoker makes a very intense flame, somewhat similar to a blacksmith's forge, and very efficient combustion can be obtained by proper regulation of the volume of air from the fan and the supply of coal from the hopper.

It is said the electric motor consumes no more current than an electric flat iron, and is connected to an automatic switch and a control device which is attached to the boiler. This device can be set to hold temperature at any predetermined point.

The stoker will stop and start all day long with very little attention. It will keep the boiler pressure where it is set on the boiler gauge.

The new Hughes building which houses the Salem hotel is using one of the stokers. Favorable comment is given by the tenants concerning the operations of the fireman, and the regulation of the temperature.

Frank M. Bligh, is enthused about the service which the stoker

is giving him, according to the Hillman brothers. Under the old system the furnace would require the attention of one man constantly, but with the new method the furnace requires only the attention of a man in the morning and in the evening.

Many past installations have been made in Portland and outside territory and it is shown that a material saving in coal and labor is made, besides eliminating smoke out the chimney and soot in the boiler.

The mechanical device was made in Portland by the Portland Wire & Iron works, a long established firm.

It caters to a field that has not been touched by anyone in any part of the country up to the present time, and there is no machine of its kind being manufactured elsewhere outside of Oregon.

The "fireman" is being sold in every state west of the Mississippi river, and including Alaska to give a complete list of the states where it has been made from the Portland factory to eastern states and as far back as New York.

It is being advertised in several national magazines and is coming into national recognition.

Manila Treasure Hunters Will Dig for Hidden Gold

MANILA, Nov. 13 (AP)—Two chests of Spanish gold said to have been hidden 100 years ago in a cave in the typhoon-swept hills of Claro Babuyan, one of the northernmost islands of the Philippine group, is challenging the spirit of several venturesome Manilaans who are preparing to go in search of the treasure.

The gold, according to the natives, was secreted by an old woman who sought protection for her treasure from the frequent earthquakes and volcanic eruptions on the island.

The crew of a coastguard cutter which recently visited the island brought word that two brass cannons about five feet long and a ship's bell taken from a British warship wrecked there many years ago were found. The bell is used to summon worshippers to a dilapidated chapel which is without a priest. There are two volcanoes on the island.

A French writer describing the baseball game played by the American teams in Paris said that their "curious uniforms give the impression of escaped convicts."

Possibly the impression came from some of the crimes committed on the diamond—for instance, stealing bases, knocking a pitcher out of the box, killing chances to score, stalling a high fly, or murdering the pitcher's fast ball.

Firpo, "the wild bull of the pampas," turned out to be a puny calf.—Pathfinder.

Kozer Attempts to Answer Question Raised as to "How Large Is Oregon?"

Secretary of State Starts When Columbia River Was Discovered and Ends With Present in Kiwanis Club Address

By SAM A. KOZER
I wonder whether Captain Gray when in 1792 he sailed the good ship Columbia into the mouth of the river that was to thereafter bear his name, or the members of the Lewis and Clark expedition, or of the Astor expedition, and of other similar expeditions, or the young poet, William Cullen Bryant, when he referred in his "Thanatopsis" to "Where rolls the Oregon," or those who followed some time later to bring to the Indians of this section religious teaching, or the first settlers who came solely for the purpose of taking up their homes here in the Oregon country had any dreams of the future development of the

state land board to make loans from irreducible school fund; to occasionally aid a district or township in addition to maintaining the state fair, and exercise a very limited supervision of the public and private utilities, etc., for the reason that manufacturing, agriculture and the general development of the state had not advanced to a great extent up to that time. The supervision and regulation of the commercial fishing and game activities were left in the hands of wardens. The educational institutions of higher learning were not proportionally developed as at the present time, consequently the aid given them was very meager. As we



SAM A. KOZER

country in which they were pioneers.

History tells us that organized government began here in Oregon when a memorial was presented to the congress on January 23, 1839, bearing the signatures of 36 individuals who then resided here. May 2, 1843, however, was the first real step toward organization when a majority of those who had assembled at Champeuse decided to cast their lot with the United States. A provisional government was immediately formed, as we all know, for the purpose of framing and carrying into effect "those rules of action which are necessary to enable men to live in a social state."

Naturally the beginning was small. The settlements were confined almost exclusively to the Willamette valley, with some of the more venturesome taking up residence near the mouth of the Columbia river. Expansion, however, was quite rapid, on account of the very favorable reports of the country that had reached the eastern states so that by the time statehood was granted on February 14, 1859, this section of our great country, which less than 100 years ago was barely trod by foot of man, had acquired a population of nearly 50,000 souls, and possessed taxable property, exclusive of its natural resources, with which it has been bounteously endowed, of more than \$24,000,000.

I shall not attempt to tell you how big Oregon was at that time. My task is to give you some vision of it today. I will leave you to draw your own pictures of that time. However, that you might have a better conception or keener appreciation of today, I would like to revert back to just about 25 years ago—a quarter of a century—when it was my privilege to first become actively identified or associated with our growing commonwealth. In the year 1899 we had a population of about 400,000, with an assessed valuation of about \$120,000,000, and outside of those few boards and officers necessary in the management and conduct of our then existing state institutions there existed six constitutional offices, and thirteen statutory offices. There was ample room in the state house to house all of the various state activities. In fact there was room to spare, for there were some rooms in the capitol building at that time which were occupied only during sessions of the legislative assembly by committees of that body. The amount appropriated by the legislature of 1899 for all state purposes for the biennial period 1899 and 1900 was \$1,387,544.25. The total of all payments into the state treasury, exclusive of trust funds and investments was \$1,499,614.95, and out of this latter sum was disbursed the expenditures from the appropriations by the legislative assembly of 1899 just mentioned.

Aside from the ordinary governmental expenses the state had not yet spread out its supervising and regulating arm to any extent. It was satisfied to regulate the pilots on the Columbia river and its tributaries; to some extent to aid horticulture; to regulate the practice of medicine; through the

viewed conditions at that time there existed a fairly satisfactory and effective government. The residents of the state were busy and apparently their energies directed toward the upbuilding of the present Oregon, and this leads us to ask ourselves just how big we are today? What has been our development in a governmental way? It is the extent of our state and its many political subdivisions that I wish to direct your attention. The cities which I shall give I wish it to be known are not all obtained as of a given date, but are sufficiently near so that a conception may be had of our proportions.

The last levy of taxes included taxes imposed by 278 separate and distinct political units or subdivisions, made up of, first the state, followed by the 36 counties, 182 incorporated cities and towns, 2218 school districts, 54 union high school districts, 193 road districts, 53 irrigation canals, 22 drainage and dyke districts, 13 port districts and one dock district. Including a fire patrol tax of \$69,668.11, there was charged on the assessment rolls of the counties of the state for the year 1923 for the state and the foregoing political subdivisions a grand total of \$40,224,751.31 which sum includes for the state for all purposes, \$5,375,348.65; the several counties for general purposes \$3,243,131.67; the counties for their respective schools and libraries, including special levies in the school districts and high school districts, \$14,069,635.95; the counties for general, special and market road purposes \$7,876,416.68, the counties for bond interest and redemption, \$1,618,862.24; the 182 cities and towns for general expenses, \$7,218,672.76; the irrigation and drainage districts, \$1,361,890.11; the ports, \$1,385,028.69, and for fire patrol and miscellaneous items, \$78,689.55. You will bear in mind that the foregoing amounts are the derivative of the direct property tax only, and so far as the state, the counties and the municipalities are concerned or affected, by reason of the police powers with which they may be possessed, do not include any receipts accruing through the exercise thereof. These are of considerable volume, in addition to the direct property taxes. They are not obtainable as to the counties and municipalities. As to the state for the year 1923 they amounted to approximately \$2,795,439.99. Quite a sum in addition to the direct property tax of \$5,375,348.76 levied for state purposes only and heretofore referred to.

The point I am endeavoring to make is that the extent of the state's activities in whatever manner exercised, whether in its administrative capacity or in the exercise of its police powers is only slightly reflected by the amount of the direct property tax, and that the major portion of the revenues necessary to meet the annual expenditures of the state is obtained through the levy or imposition of what are usually styled indirect taxes. Some idea of the extent of these may be gained by reference to the principal items employed in the classification of state receipts by the bureau of the census of the department of commerce of the na-

tional government in its periodical compilations of state revenues and expenditures. Following these classifications under the division of what are usually styled "fees," the payments into the Oregon state treasury during 1923 amounted to \$225,058.94. They were principally from fees prescribed by law for special services by the state engineer, the secretary of state, the superintendent of banks, the corporation commissioner, the insurance commissioner, the state market agent, the clerk of the supreme court, and others. For "licenses" imposed the sum of \$5,262,509.29 was received. Collected principally by the secretary of state for motor vehicle licenses; by the public service commission for automobile transportation licenses; by the corporation commissioner for corporation licenses; by the labor commissioner for factory inspection licenses; by the state game warden for hunters' and anglers' licenses; by the master fish warden for commercial fishing and poundage licenses; by the insurance commissioner for insurance and real estate brokers licenses; and by sundry other officials for various professional and occupational licenses prescribed by law. From "sales of property, rentals, etc.," matriculation fees and for sundry services performed by the state, a total of \$1,062,453.77 resulted. This sum includes the proceeds of the sale of the products of the various experimental stations operated throughout the state under the direction of the Oregon Agricultural college; the proceeds of the operation of the flax industry at the penitentiary;

The recent modern miracle of sending a photograph of President Coolidge across the Atlantic by radio has again called public attention to the gigantic activities of the scientific world in its efforts to reveal the secrets of nature relative to the invisible giant whose mighty power apparently holds the universe together. Science has succeeded in harnessing the giant to many forms of useful work, power, heat, light, telephone, telegraph, radio, all developed to the point of practical use to humanity. But what is this force? and whence its source? Of these things we are as ignorant as Father Adam. Science has also demonstrated that every particle of matter is actuated by the power of this invisible giant. At one time, but a few short years ago, the atom was conceived to be the smallest particle of matter—the basic unit of all substances. But the discovery of radium, and the subsequent activities of science stimulated by that discovery, has revealed that if an

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UNSEEN GIANT SHOWS POWERS

Science Harnesses Force to Human Industry; Radio Photos Reason

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atom could be magnified to the size of a wash tub it would be found full of still smaller particles which science has named "electrons." Science has also revealed that these electrons are always in motion; that they are actuated by electrical influences; that each electron has its positive and negative poles. The whirling of the electrons inside the atom impart to every particle of matter in the universe a vibratory motion. Each separate substance having a different rate of vibration peculiar to its own composition. This is one of the facts so far discovered which makes radio and other useful applications of the power of the giant possible.

Dr. B. H. White, a well known physician of Salem, says that while attending post-graduate classes in Kansas City, Mo., a few months ago he witnessed the radio transmission of a picture across a room and so he is not surprised to learn that the work has progressed to the point of transmitting it across the ocean. Having been a student of the late Dr. Abrams, author of the application of the vibratory nature of matter to the diagnosis and cure of disease, Dr. White was asked to explain the relations of radio activity to organic matter, especially to animal forms of organic matter. He said that according to the electronic theory the electrical activity of the electrons imparted their motion to the atom causing a vibration similar to the fenders of a car from the engine knocking. If one atom of matter is thus vibrating, then all atoms are vibrating from the same cause. The rate of vibration de-

GEOLOGY COURSE TO BE OFFERED

University Arranges for Series of Twelve Lectures in Portland

UNIVERSITY OF OREGON, Eugene, Dec. 13.—A series of twelve lectures on the geology of Oregon is to be offered by the University of Oregon Portland center the winter term, for which university credit will be given. This is the first time such a complete course in this subject has been scheduled. Professors W. D. Smith, E. L. Packard and E. T. Hodge of the university geology department, and I. W. Williams, former state geologist, will deliver the lectures.

The general geology of the Oregon section, including the geography and physiography, ancient, tertiary and later rocks, development of ancient invertebrate and mammalian life of Oregon, history of the Willamette valley, Columbia gorge, the Willawas and Snake river canyons, mineral resources, and the geology of the southern and northern Cascades and of southeastern Oregon.

We didn't even know a friend of ours was married until the other day we saw him carrying an umbrella.

(Continued on page 6.)

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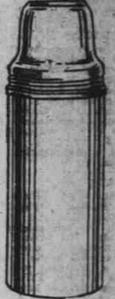
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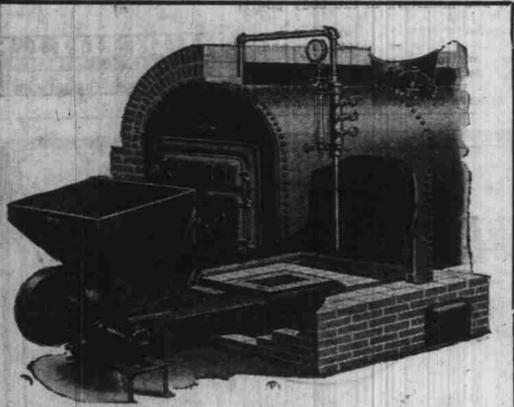
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