

**MEDFORD MAIL TRIBUNE**

AN INDEPENDENT NEWSPAPER PUBLISHED DAILY EXCEPT SATURDAY BY THE MEDFORD PRINTING CO.

The Democratic Times, The Medford Mail, The Medford Tribune, The Southern Oregonian, The Ashland Tribune.

GEORGE PUTNAM, Editor and Manager

Entered as second-class matter November 1, 1909, at the postoffice at Medford, Oregon, under the act of March 3, 1879.

Official Paper of the City of Medford.

**SUBSCRIPTION RATES**

One year, by mail, \$5.00  
One month by mail, .50  
Per month, delivered by carrier in Medford, Jacksonville and Central Point, by mail, per year, 2.00  
Sunday only, by mail, per year, 1.50  
Weekly, per year, 1.50

**Full Leased Wire United Press Dispatches.**

The Mail Tribune is on sale at the Ferry News Stand, San Francisco, Portland Hotel News Stand, Portland, Rowman News Co., Portland, Or., W. O. Whitney, Seattle, Wash., Hotel Spokane News Stand, Spokane.

**SWORN CIRCULATION.**

Daily average for six months ending December 31, 1910, 2721.

**MEDFORD, OREGON.**

Metropolis of Southern Oregon and Northern California, and the fastest growing city in Oregon.  
Population—U. S. census 1910, 8549, estimated in November, 1910, 10,000.  
Five hundred thousand dollar Gravity Water System completed, giving finest supply pure water and water and sixteen miles of street being paved and 600,000, making a total of twenty miles of pavement.  
Postoffice receipts for year ending November 30, 1910, show a gain of 61 per cent.  
Bank deposits were \$2,376,532, a gain of 22 per cent.  
Banner fruit city in Oregon—Rogue River Spittingberg apples from sweepstakes prize and title of "Apple King of the World" at the National Apple Show, Spokane, 1909, and a car of Newtowns won First Prize in 1910 at Canadian International Apple Show, Vancouver, B. C.  
Rogue River pears brought highest prices in all markets of the world during the past six years.  
Write Commercial club, including 5 cents for postage for the finest community pamphlet ever written.

**THE AMERICAN NEWSPAPER**

WILL Irwin, Collier's Weekly's "National reporter" is publishing in that journal a series of articles on the American newspaper. Among other things Mr. Irwin says: "Every careful observer of newspapers during the past twenty-five years has noted a change of policy, which there is no mistaking. In the early days of American journalism the editor was pre-eminent. Generally an able writer, a man of scholarship and wide experience, and with a comprehensive understanding of public affairs, he was a man of powerful influence among the readers of his newspaper. Newspapers fifty years ago were not the enormously profitable properties that they are today, but were regarded as public institutions, in which money making was no more a proper incentive than it would have been in a university. The advertising patronage of a newspaper was a secondary consideration, and its part in the support of this country have been absorbed by the remarkable commercial development of this nation, and have accepted the spirit of the age to the extent that they are now, not only in this country, but in Europe, conducted as vast dividend paying enterprises. The evolution of newspaper management in Europe has put almost every large paper on the continent in Jewish control. In this country the same tendency is also now being felt, and whatever the ownership, the American newspaper, with a lamentably few notable exceptions, is now conducted for profit rather than for the sake of its possible service to the community and the nation.

The degeneracy of the editorial page has been more than remarkable. While the advance in general education has been very great, while libraries and other sources of information have marvelously multiplied, while every means for the making of a great newspaper is incomparably superior now to fifty years ago, the drift of the editorial strength and influence has been directly opposite, until now, with many of the largest papers in this country the editorial page is insignificant. The New York Herald, probably the most profitable newspaper property in New York City, has none at all, and the few newspapers which have held faithfully to the old-time standards are mainly in the South.

Undoubtedly the commercialism of the newspaper has reached its maximum. Already the public of this whole nation is beginning to ask for something more worth while in newspaper service. And the few American newspapers which are giving even passing attention to the quality and influence of their editorial page, the papers that are beginning to censor their news items under the strict surveillance of absolute truth and full justice, are meeting more than mere approbation at the hands of the public.

The public and newspaper publishers have yet to learn some great and fundamental truths about their own people. The commercial spirit of this nation is wholly superficial. At heart the American people, wherever found, are sentimentalists and idealists. On commercial grounds they are calculating traders, holding out for the last penny. But when the average American is paying for what he wants for his own pleasure, information or personal advantage, his generosity is proverbial even at home, and certainly abroad.

The day is coming when newspaper publishers will discover that a newspaper which is founded upon the sentiment, idealism and sense of right of the American nation, the newspaper which will give first attention to the quality that goes into its columns instead of the acreage to be occupied, the newspaper which will develop and maintain a standing, personal worth and character which responds to the great composite heart of the community, the newspaper which dares to make its business columns not only secondary but subservient to its editorial policy, will, despite the so-called superficial and rapidly vanishing commercialism of this age, pay the largest dividends.

**Lime-Sulphur—Its Use as a Fungicide and an Insecticide**

—By— Prof. P. J. O'Gara, Pathologist. Written especially for the Medford Mail Tribune.

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**(Third installment.)**

**The Chemistry of Lime Sulphur and Other Sulphur Compounds.**

As has been stated in the preceding chapters, lime-sulphur and other compounds of sulphur were used at a rather early date for the control of insects and fungous plant diseases. It was also stated that it was originally used as a sheep dip and many of the formulae which were used for this purpose were subsequently used in the control of insect and plant diseases. Many modifications of the original formulae were adopted by different horticultural bodies, by individual orchardists and by entomologists. The various modifications of the lime-sulphur spray were based upon a great variety of conceptions as to the insecticidal properties of the several constituents of the wash. There were many who held that the lime was the active agent and that the only necessity for the sulphur, as well as salt, which was also used, was to get the lime into solution, thinking that the greater the proportion of lime which could be used, the more effective the wash would be. About the year 1902 some very careful investigations of various compounds of lime-sulphur were made by Dr. J. K. Haywood of the bureau of chemistry, United States department of agriculture, and by other chemists, notably the chemists of the Washington agricultural station. The first results of their work showed that the salt which had been previously used had no effect whatever upon the nature of the lime-sulphur compounds of the spray. They also showed that certain definite chemical compounds were produced in the wash, since the portion of lime and sulphur which dissolved remained the same, regardless of the amounts of the two, namely, lime and sulphur, which were used in mixing the ingredients. This was a long step in the study of this valuable spray.

Before going into the nature of the compounds formed, it would be well to have a clear idea as to what happens when two elements or compounds, having a chemical affinity for each other are brought together. Among the most important theories of modern physical science is the one which is based upon the supposition that all substances are made up of small particles called atoms. The theory that matter is not infinitely divisible, but that upon attempted separation into smaller parts, a mass not capable of further subdivision would result, was held even by the ancient Greek and Roman philosophers, namely, Aristotle, Laertius and Epicurus, and this theory has been transmitted to the present generation with many important modifications. Although the atomic theory had been held by the ancients, very little was done to elaborate the theory and to make chemistry a real science. We may therefore trace the growth of chemistry from the beginning of the eighteenth century. From that time on chemistry became a true science and today is one of the most valuable sciences which has come to the aid of mankind.

The first decade of the nineteenth century brought the discovery that when two substances unite chemically a compound is always formed in unvarying proportions by weight. It was John Dalton who revived the idea of the atom which was first taught by the Greek philosophers. He taught that an atom is indivisible, that is to say, literally an uncuttable particle, and is defined as the smallest part of an element which can take part in a chemical change. We cannot isolate individual atoms and by no conceivable method could they be weighed if isolated, but, though unable to determine their absolute weights directly we note the weights of the various atoms relatively to one another. The atom of hydrogen being the lightest, is taken as unity, and compared with it, the atom of oxygen weighs in round numbers, 16; sulphur 32.1; calcium 40.1; that is to say, we simply choose hydrogen as the unit of weight and compare all other chemical elements with it as a standard. In a crude way this comparison is not unlike a weight used on a scale-pan for measuring or weighing different substances. When two elements unite the two atoms are said to form a molecule and the weight of the combined elements is known as the molecular weight of the compound. For instance, water is represented by the chemical formula H<sub>2</sub>O and the molecular weight of the water molecule is 18 since an atom of oxygen is 16 and two atoms of hydrogen equals two, the sum being 18. We will now try to understand what is to follow in discussing the compounds of calcium and sulphur.

The metal calcium combines with carbon and oxygen and forms what we call limestone or lime, which is chemically known as calcium carbonate. Every one knows that the limestone or lime-rock cannot be used as such, but must be burned in a kiln. The process of burning or heating causes the lime-rock to break up into two compounds, namely, calcium oxide and carbon dioxide. The calcium oxide, which is represented chemically by the formula CaO is what we term burned lime, quicklime, or unslaked lime. When a mixture of lime (calcium oxide, CaO) is treated with water, a slaked lime, which is known as calcium hydrate Ca(OH)<sub>2</sub> is formed. The slaked lime or calcium hydrate is the form into which we introduce the sulphur so that it will combine when heated or boiled with the sulphur. Now calcium is known to form several different compounds with sulphur. When a mixture of lime, water and sulphur are heated, chemical combination takes place, the metal calcium of the lime combining with the sulphur. One peculiarity of the combination of calcium and sulphur is that a definite amount of calcium can combine with varying amounts of sulphur to form the several different compounds known.

The combining relations of calcium and sulphur are such that five parts by weight of calcium (which is equivalent to seven parts of pure calcium oxide or lime) will combine with four parts of sulphur or some multiple of four, as 8, 12, 16, 20, etc. We do not know how many of these compound may actually be formed but it is theoretically possible to have at least the following five:

Parts of Calcium (Ca) by Weight	Parts of Sulphur (S) by Weight	Chemical Formula	Name
5	4	CaS	Calcium mono-sulphide
5	8	CaS <sub>2</sub>	Calcium di-sulphide
5	12	CaS <sub>3</sub>	Calcium tri-sulphide
5	16	CaS <sub>4</sub>	Calcium tetra-sulphide
5	20	CaS <sub>5</sub>	Calcium penta-sulphide

**COMMUNICATIONS.**

To the Editor: In commenting on passage of the Pierce (or Hume) bill by the house of representatives at Salem, you name the members who stood by their pledges, voted against the bill, and thus acknowledged the will of the people to be supreme. So far I have failed to see a complete list of names of those representatives who voted for the Hume bill, thus violating their pledges in most instances, and they act, as loudly as words could proclaim it, defying the will of the people of the whole state.

Let us have a complete list of these names as they are the men whom the voters of Oregon want to remember at future elections.

ONE OF THE MAJORITY OF 16,315.

**"MAGAZINES FIGHT FOR LIVES"—McCLURE**

NEW YORK, Feb. 15.—Announcing that the magazines of the country had raised \$100,000 to fight the proposed increase in magazine postal rates, S. S. McClure, publisher of McClure's Magazine, today contri-

**City Property**

First class business property, improved or unimproved, at the lowest figures.

Dwellings of all kinds in all parts of the city at prices ranging from \$500 to \$15,000.

A good platting proposition of seven acres within city limits, on good street, \$6000.

Best residence lots on West Main street; south front; 70x140; corner or inside lots, \$1575.

Lots on paved street, with all improvements, \$650.

Lots on Second street, with water and sewer, \$350.

Call on us for anything in city property and you will find we have it at prices and terms that are always right.

W. T. YORK & CO.  
102 West Main.  
Bell phone 3391. Home phone 31.

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**U-GO HIGH CLASS STOCK CO.**

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The Cowboy and the Lady

Three-act Comedy Drama by Marjorie Mandeville and her Company. Specialties between acts. Reserve your seats by Phone 2971.

Medford's Exclusive Picture Theatre. Latest Licensed Photographs.

**Lacey Theatre**

One Dime—No More—One Dime.

**NATATORIUM**

TODAY Afternoon and Evening Roller Skating, Bowling, Concert, Rifle Range, Billiards.

THURSDAY EVENING (Special.) Ladies' Skate Free.

**BIG DOUBLE BILL**

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WM. CARTWRIGHT Comedian. THE LAUGH MAKER

Claman & Gladys Fuller Presenting the comedy sketch "The City Girl and Her Country Beau"

Miss Fuller being one of the few lady ventriloquists. Introducing her two Mesmeristons boys, Patsy and Snowball

MATINEE EVERY SATURDAY AND SUNDAY AT 2:30. Three Reels of Pictures and a Good Song.

**"NAT" THEATRE**

Changes its program every Sunday, Wednesday and Friday.

A special matinee every Sunday afternoon.

We show nothing but the very latest and best films.

ADMISSION 10c.

**WHEN DOWN TOWN DROP IN AT THE**

**"Nat" Confectionery**

ICE CREAM, SOFT DRINKS, CONFECTIONERY, LUNCH

A light, pleasant room, open from 8 a. m. to midnight.

L. M. GRAMES, Proprietor

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We carry a very complete line of draperies, lace curtains, fixtures, etc., and do all classes of upholstery. A special man to look after this work exclusively and will give as good service as is possible to get in even the largest cities.

Weeks & McGowan Co

**MEDFORD CONSERVATORY FOR MUSIC AND LANGUAGES**

NAT. BUILDING ALL BRANCHES OF MUSIC. FULL FACULTY. G. TAILLANDIER, DIRECTOR.

Even a very enthusiastic advertisement of real estate is not often misleading—for a good real estate bargain justifies some enthusiasm in advertising.

**9000 EACH DAY VIEW EXHIBITS**

**Great Northern Railway Car Attracts**

Thousands of Persons Daily Throughout East—Great Interest is Displayed.

President L. W. Hill of the Great Northern railway system, commenting in a letter to the Portland Commercial club on the phenomenal attendance throughout the east upon the Oregon exhibit car, says that the figures show more than twice the interest that was excited by any western exhibit car last year.

Hill says the attendance has reached as high as 9000 a day. So great is the demand for a view of Oregon products that the management of the car has been compelled to keep it open evenings at most places visited, and the last of the interested visitors to study Oregon agricultural wealth were found in the car until near the midnight hour.

Registration of the visitors number thousands in every prominent community, and to each of these is given interesting literature on Oregon. Farms and orchards are the principal inquiries. Dry farming, yet little understood in the east, comes in for a heavy percentage of interest already, and as the lectures and literature unfold its possibilities, and the vast acreage of Oregon available for dry farming methods, it is apparent that the number of persons who will stake their future on this class of work is very large.

In the lecture rooms, conducted wherever the Great Northern car goes, there is never any seating capacity unoccupied, if the community is of any considerable size. Inquiries made of the lectures indicate the keenest interest in Oregon fruits.

All these things are taken by the railway magnate and the immigration forces working to give Oregon its population dues, as a sure sign of tremendous fides of people this year. None would be surprised if the number coming during the colonial period of spring was double of treble the best record of a preceding year. But the colonial period will see only a small percentage of the real inflow, as it is apparent that all the season there will be swarms of homeseekers taking inventory of the resources of Oregon.

**GREATER MEDFORD CLUB ENTERTAINS AT "NAT"**

The ladies of the Greater Medford club held a "bridge" and "500" party in the small hall room of the Natatorium Tuesday afternoon.

About 75 attended the affair, which was given by the club in order to "break the ice" for new comers to the city. Another reception will be given in the same hall in the near future.

Tea and cake was served.

**Haskins for Health.**

Haskins for Health.

**REAL ESTATE EXCHANGE MEETS**

Realty Brokers Who Form New Association Met in Commercial Club Rooms Last Night to Frame Constitution and By-Laws

For the purpose of framing a constitution for the newly formed real estate exchange, the local realty dealers who form its membership held a meeting in the Commercial club rooms in the Natatorium building last night.

The by-laws were not reached, as the evening was utilized in accepting the constitution which, accepted piece by piece, was debated upon at length to determine the effect it will have upon the business here.

Another meeting will be held Thursday evening.

The constitution accepted credits the association with the following reasons d'etre:

The object of this, the Medford Realty association, is to bring the real estate men of Medford together to assist in the advancement of Medford and the Rogue river valley in general, and the real estate business in particular; co-operate with the Medford Commercial club to encourage the location in Medford of manufacturing, industrial and mercantile interests; to promote legislation for needed public improvements; to procure from owners written contracts of sale; to effect a uniform rate of commission to be charged in real estate transactions, and to form a real estate exchange where property may be listed by brokers or owners, and shall be posted in such man-

**BEAUTIFUL HOME RANCH SECURED**

Chicago Man Buys Zimmer Property About Two Miles Southwest of City—Consists of 14 Cases All to Trees.

H. A. Gray and wife of Chicago have purchased, through the agency of the Moor-Elm company, the property of Nathan Zimmer, situated about two miles southwest of Medford. The land comprising 14 acres, is all set to trees, two thirds of which are in bearing. It is considered one of the finest home propositions in the valley. The new owner expects to occupy the premises early this spring. The consideration is said to be \$12,000.

Through the operation of the inheritance tax law the state of West Virginia will get \$600,000 out of the Elkins estate of \$20,000,000. One fine thing about it is that it will not make any difference whether the heirs try to break the will or not.

As may be determined by the by-laws to the effect that each member of this association may add the descriptions of this property for sale to his listings. It shall be the special object to create and maintain among Medford real estate men a high standard of business methods and integrity, a spirit of fair and honorable competition to assure the buyer and seller the services of responsible and trustworthy agents upon a definite and uniform standard of contract and charges, to the end that the interest of buyer, seller and broker may be protected.

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**Automobile Repairing.**

**CRATER LAKE GARAGE**

22 South Riverside Phone Main 4282. Home 298 K. N. H. Mark

**Medford Book Store**

Phone Main 4282. Home 298 K. N. H. Mark

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