

MEDFORD MAIL TRIBUNE

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

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GEORGE PUTNAM, Editor and Manager

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Official Paper of the City of Medford. Official Paper of Jackson County.

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SWORN CIRCULATION. Daily average for eleven months ending November 30, 1911, 2751.

Full Licensed Wire United Press Dispatches.

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

MEDFORD, OREGON. Metropolitan of Southern Oregon and Northern California, one of the fastest-growing cities in Oregon.

Population—U. S. census 1910—8840; estimated, 1911—10,000. Five hundred thousand dollar Gravity Water System completed, giving finest supply pure mountain water, and 17 1/2 miles of streets paved.

Postoffice receipts for year ending November 30, 1911, show increase of 13 per cent. Banner fruit city in Oregon—Rogue River Spitznberg apples won 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.

First Prize in 1911 at Spokane National Apple Show won by carload of Newtowns.

Rogue River pears brought highest prices in all markets of the world during the past six years.

Write Commercial Club, enclosing 5 cents for postage for the finest community pamphlet ever published.

OUR CARROT MAN

(Editorial in Ashland Tidings.) The Tidings was presented Saturday with an image, reported by the donor to be an exact type of the editor of The Medford Mail Tribune.

It is wrought out of carrots and moss. Others who have seen it say it looks "just like him."

We have seen the Tribune man but once and did not take more of him on that occasion than he did of us; we do not know that he took any of us, for we did not see any mention of it in his "in town" column—so we are not a competent judge as to the truth of the likeness.

Nature has provided for the legs and arms, in growing the vegetable, while the genius of the man, because it bears a fierce aspect of his hair, his pipe and his body.

Withal the image is odd enough and displays one of the mirthful moments when nature plays her pranks in producing man's kind in her work of vegetation.

We have named it Put-name, because it bears a fierce aspect, like his editorials do when discussing the Oregonian, or when he threatens to spank somebody or something.

It is truly a marvel of nature and a work of art, and, some say, like Boswell's Johnson, it depicts the subject with such sublime fidelity that one would know him, in catching a glimpse of his apparition or reincarnation, even though he had never met him in life.

It is truly a combination of art and nature that will well repay a visit to this office to see. It is worth riding from the village down the valley to Ashland, the peerless, to get a look at it.

Mrs. M. Riley is the artist who discovered and embellished the image.

AL KAUFMAN GOES KNOCKOUT ROUTE

NEW YORK, Dec. 29.—Al Kaufman of California is in the has-been class today, Al Palzer, practically unknown, sending him to the mat for the count in the fifth round of their bout at the National Sporting club here.

Kaufman was knocked down in several of the preceding rounds. Kaufman put Palzer down once in the first round. It was a fierce, rushing, rough fight while it lasted.

Kaufman had apparently struck his stride and was boxing strongly in the fifth when suddenly a terrific body punch from the Iowa hope laid him low. The knockout was complete.

BLANKS FOR NEW LICENSES RECEIVED

William L. Finley, state game warden, has written County Clerk W. R. Coleman that the state will print the hunters' and anglers' licenses this year and that a supply for Jackson county will be forthcoming the latter part of this week.

Heretofore each county has borne the expense of printing the licenses. Warden Finley says he has already sent out 40,000 of the blank licenses to counties farthest away from Salem, where they are printed.

DOES FRUIT RAISING PAY?

THE present year has been considered an off year in fruit districts of the northwest. Unfavorable weather conditions prevented a heavy yield and a tremendous eastern fruit crop cut down the price. Yet Rogue river valley fruit has commanded good prices—with the exception of Bartlett pears,—what in other districts would be called fancy prices.

Returns have not all been received for Comice pears. They are selling as high as \$8 a box in the eastern markets. But it is not the occasional high price that tells the story. It is the average price of the fruit throughout the season.

The Rogue River Fruit and Produce association, handling three-quarters of the orchard output of the valley, give the following as the average net prices realized for this season's crop handled through the association:

Bartlett pears, 4 tier fancy, \$1.12; 5 tier fancy, \$785; 4 tier choice, \$.80; 5 tier choice, \$.748.

Clairee pears, 4 tier fancy, \$1.245; 5 tier fancy, \$1.233; 4 tier choice, \$.987; 5 tier choice, \$.95.

Howell pears, 4 tier fancy, \$2.245; 5 tier fancy, \$2.207; 4 tier choice, \$1.979; 5 tier choice, \$1.902.

Anjou pears, 4 tier fancy, \$2.24; 5 tier fancy, \$2.329; 4 tier choice, \$2.00; 5 tier choice, \$1.884.

Bosc pears, 4 tier fancy, \$2.56; 5 tier fancy, \$2.54; 4 tier choice, \$2.018; 5 tier choice, \$2.051.

Winter Nelis pears, 4 tier fancy, \$2.12; 5 tier fancy, \$2.034.

Jonathan apples, fancy, \$1.84 to \$1.40; choice, \$1.33 to \$.936.

Newtown apples, fancy, \$1.99 to \$1.53; choice, \$1.20.

There is probably not another fruit section in America whose yield has averaged as good a price this year as the Rogue river valley.

IMPORTING FEED FOR LIVESTOCK.

THE record of a single feed mill in Medford, according to the sworn statement of its proprietor, shows that between November, 1910, and June 1, 1911, ninety-nine cars of hay and grain were shipped into Medford from points outside the Rogue river valley.

In detail, there were 54 cars of alfalfa hay, 540 tons, valued at \$14 a ton, \$7560; thirty cars of barley, 600 tons, at \$30 per ton, \$18,000; fifteen cars of oats, 300 tons, at \$32 a ton, \$9600; total, \$35,160.

Every bit of this feed should have been raised in the valley. There is idle land sufficient to produce many times this quantity, and a ready market with good prices awaits the farmer.

To reap the greatest harvest it is necessary to irrigate, but there is ample water at hand for those who desire to use it. Instead of importing foodstuffs, we should be exporting them.

The balance of trade is against the valley in an off year for fruit for the reason that we do not produce as much as we consume, and thereby send out of the country money that should be distributed at home—a condition that should be changed and changed this year.

A Test of Fuel Oils

By P. J. O'GARA.

Pathologist and Special Meteorological Observer U. S. Weather Bureau.

(Continued from Yesterday.) Tables of Comparative Tests.

In the following tables will be found the burning time per hour of one gallon of each one of the fuels used, together with the percentage of soot and residuum left. Each type of pot was filled to its full capacity, and the total elapsed time of burning noted. The quantity of oil burned divided by the elapsed time in hours gave the average time required to burn one gallon of fuel, which, for the orchardist, is the standard of measure in orchard heating. In order to find the number of pounds consumed per hour, divide the weight of one gallon by the time required to burn a gallon. It will be seen that for most of the fuels burned in the common or lard-pail types, or their near relatives, the quantity burned per hour is not far from one and three-fourths to two pounds per hour.

However, when these types were used with a soot arrester the burning time was considerably increased and the consumption per hour very much decreased. If it is desired to get the approximate number of heat units generated per minute, divide the calorific power of a gallon of the oil by the total number of minutes required to burn a gallon. It must be remembered that the total burning time as obtained is an average of several burnings. This average by no means indicates the rate at which the fuel is consumed in many types of pots. Some very interesting experiments were made to determine the rate at which the oils are burned, and it was found out that the fuel consumption per unit of time when the pots are first lighted is much more rapid than when the oil is nearly consumed. For each type of pot, as well as each fuel oil, rating curves were drawn showing the actual rate of oil consumption. These rating curves also show the rate at which heat is given off. At another place the method of obtaining these curves will be explained. It will be shown why it is that when heat is most needed there seems to be a falling off of the amount of heat given out by the smudge pots, although they may be burning. Very often we have heard fruit growers say, "I could not keep up the temperature at 6 a. m., just when I needed the heat most."

We will try to explain why this is. During the course of the experiment a very interesting law of burning, or rather fuel consumption, in the common lard-pail type was worked out. It was shown that the rate of fuel consumption in pots of the same type is not in direct proportion to the diameters of the top of the pots or areas of the surface of the oil exposed to the air. With clean pots burning the same oil under the same conditions it was shown, for instance, that the time required to consume one gallon of fuel oil in the one-gallon pot is to the time required to consume one gallon in the two-gallon pot inversely as the square of the diameter of the one-gallon pot divided by the square of the depth is to the square of the diameter of the two-gallon pot divided by the square of its depth. It must not be understood that this law will give the exact burning time of the type of pot which is too much out of proportion as to diameter of top and depth, but for the Bolton or lard-pail type it seems to be fairly accurate with clean pots. The burning time may be calculated for a unit quantity within a small percentage of error. For instance, the burning time of a gallon of oil in a two-gallon Bolton was found by experiment within ten minutes of the actual elapsed time. Naturally, it is very difficult to keep conditions always the same in the field. Slight wind currents will have a great deal to do with the time of burning any fuel.

TABLE 1.

Table with 4 columns: Fuels, Burning Time of One Gallon, Per Cent Soot and Residue, Remarks. Rows include Stove distillate, Slope distillate, Richmond oil, and Crude oil.

TABLE 2. Common Lard-Pail Heater With Soot Arrester, Capacity One Gallon.

Table with 4 columns: Fuels, Burning Time of One Gallon, Per Cent Soot and Residue, Remarks. Rows include Stove distillate, Slope distillate, Richmond oil, and Crude oil.

TABLE 3. Bolton One-Gallon Heater Without Soot Arrester, Capacity One Gallon.

Table with 4 columns: Fuels, Burning Time of One Gallon, Per Cent Soot and Residue, Remarks. Rows include Stove distillate, Slope distillate, Richmond oil, and Crude oil.

TABLE 4. Bolton One-Gallon Heater With Soot Arrester, Capacity One Gallon.

Table with 4 columns: Fuels, Burning Time of One Gallon, Per Cent Soot and Residue, Remarks. Rows include Stove distillate, Slope distillate, Richmond oil, and Crude oil.

By comparing the common lard-pail heater without soot arrester with the Bolton one-gallon heater without soot arrester, it will be seen that there is practically no difference in the burning time of each kind of oil. It will be seen that the total burning time of the stove distillate in each case varied only ten minutes in favor of the common lard-pail. With the slope distillate the total burning time varied ten minutes in favor of the lard-pail. With the Richmond smudge oil the burning time was in favor of the Bolton heater 27 minutes. With the crude oil there is a difference of 15 minutes in favor of the common lard-pail. The percentage of residue left was the same in each case, excepting the Richmond smudge oil, in which the common lard-pail has an apparent advantage of 2.8 per cent less residue.

We will leave the reader to compare the common lard-pail heater with the soot arrester and the Bolton one-gallon heater with soot arrester. It is very evident that if there is any distinct advantage in burning time it is largely with the common lard-pail. Furthermore, the present of soot and residue left unburned is also in favor of the lard-pail heater, with the exception of the crude oil, where the difference is not great. Right here it should be remarked that the arrester simply cuts down the burning area and, therefore, lengthens the burning time. When the pots are first lighted combustion is fairly rapid and compares favorably with the open pot without arrester; but after a short time the arrester tends to become clogged with soot, and, besides, throws a great deal of soot down into the oil, making it "mucky" and, naturally, less easy to evaporate. We have stated at the very beginning of this paper that a unit quantity of any fuel oil is capable of generating just so many heat units in combining with the oxygen of the air. If, therefore, the time of burning this quantity of fuel oil is doubled, naturally the number of heat units generated in a unit of time is decreased by one-half. This is just what happens with the soot arrester. With the heavier oils, the soot arrester actually increases the burning time per unit quantity much more than double, as compared with the pot without arrester. Take, for instance, the crude oil in the Bolton pot as well as the common lard-pail. After burning between five and six hours, respectively, we find in both cases more than a third of the oil left unburned; not that the oil would not burn under normal conditions, but because the clogging effect of the arrester put the flame out. In the case of the slope distillate and the Richmond oil it is seen that only a rather small percentage of residue was left upon relighting the oils after the removal of the soot arresters. A sufficient number of burnings were made in each case to warrant the averages as given in the tables. I may also say that the rating curves also show just how the oil burned in each particular case. Any statement that the arrester will double the burning time and at the same time give at least 50 per cent as much heat in a unit of time as compared with the pot without the arrester is an assumption which is wholly unwarranted. As a matter of fact, if we compare the amount of residue left we will see that there was only one fuel, namely, the stove distillate, which gave the full value of the fuel in generated heat, or as nearly so as this crude type of apparatus will permit. In every other case the percentage loss ran all the way from 10 per cent to nearly 39 per cent. It is hardly possible that only a little more than 50 per cent of oil actually burned could give up 90 per cent of the total calorific value of the gallon. Even in dividing the total quantity burned within a given time by the time required to burn, we merely get the average rate of burning which is far from being the true rate. We will show later on that in the lard-pail and Bolton types of heaters without arresters the burning rate during the last hour and more is a little more than 50 per cent of the burning rate when the pots are first lighted. Since this is true, when the pots are burning low only 50 per cent as much heat is given up. This explains why in the later hours of the morning the temperature increase in an orchard over that of the outside temperature is less than at any time during the night, providing the conditions of air movement are the same. In some actual observations made during the past three years by this office it has been shown that this difference in temperature may be all the way from 25 to 50 per cent, and actually compares with the burning rate of the oil in the pot as determined by direct experiment. We have a mass of data which show that with the same number of pots burning and the atmospheric conditions remaining the same a difference of 5 to 6 degrees between the temperature in the orchard and that outside of it could be maintained for a time after the pots were lighted, but later on when one-half to two-thirds of the fuel had burned the difference dropped to 2 to 3 degrees. We can easily understand now why this is true of a type of pot such as the lard-pail type. With such types as may be regulated or which may have a constant burning surface or constant ratio of depth to surface the results are quite different. The only conclusion that one may come to is, if the simple lard-pail or Bolton type of the one-gallon size is used, that a sufficient number of pots should be had as a reserve to be lighted when the natural drop comes and which is due to the construction or form of the pot. In any other type of pot which can be regulated, if allowed to burn without regulation, the same thing will happen to a greater or less extent, depending upon the depth of the pot as compared with the area of the opening. Shallow pots are necessarily less affected than those in which the ratio of depth to top diameters is too large. To sum the whole matter up, it may be said that the rate of fuel consumption should be such that there is no marked difference in the amount of heat given off, or which is the same thing, the amount of fuel consumed, in a given unit of time. Furthermore, the rate of burning should be such that the fuel may be used economically. It is very much better to have a large number of small fires than to have a few large ones so that a large pot capable of burning double the quantity of oil in a unit of time may not be the best. We will understand this last statement better after inspecting the following tables:

TABLE 5. Bolton Two-Gallon Heater Without Arrester, Capacity Two Gallons.

Table with 4 columns: Fuels, Burning Time of One Gallon, Per Cent Soot and Residue, Remarks. Rows include Stove distillate, Slope distillate, Richmond oil, and Crude oil.

TABLE 6. Bolton Two Gallon Heater With Soot Arrester, Capacity Two Gallons.

Table with 4 columns: Fuels, Burning Time of One Gallon, Per Cent Soot and Residue, Remarks. Rows include Stove distillate, Slope distillate, Richmond oil, and Crude oil.

Not having any two-gallon lard-pail type pots at hand, the Bolton two-gallon heater was used. A band of thin sheet iron was bound around the holes at the top, virtually converting it into a lard-pail heater of the two-gallon size. As the results were so nearly like those given in Tables 5 and 6, they are omitted here. As a matter of fact, the comparison would be just about the same as was given in discussing the one-gallon types.

(To Be Continued.)

Not many investors will buy unadvised property in this city this week.

Seattle Appraisals

Several Medford people have employed us to appraise Seattle real estate. Such appraisal is usually worth more than it costs. Ira J. Dodge of Medford was formerly connected with this office. Other Seattle and Medford references on request. R. C. ERSKINE & COMPANY, 200 New York Bldg., Seattle (Charter Member Seattle Real Estate Assn.)

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