

NEW BOOK ON DRY FARMING

PROF. THOMAS SHAW IS AUTHOR

Agricultural Authority Gives Farmers of Dry Countries Valuable Information, Treating This Subject Thoroughly.

(St. Paul Pioneer Press): "Dry Farming" is the subject of the latest publication of Prof. Thos. Shaw, who was formerly connected with the Agricultural College of the University of Minnesota. What is termed the dry land area embracing five hundred million acres in the United States and Canada, all of which may be successfully tilled, comes in for consideration by Prof. Shaw. A detailed description of the most successful way of farming each particular section is given. Synopsis of Chapters. In nineteen chapters covering 460 pages, the book discusses the following: What is meant by Dry Land Farming. The Origin and History of Dry Farming. The Domain of Dry Farming. Soils in Dry Areas. Soil Moisture and Dry Farming. Plant Growth in Dry Areas.

Cultivation in Dry Areas. Sowing and Planting in Dry Areas. Crops That May Be Grown in Dry Areas. Growing Grain Crops in Dry Areas. Growing Cultivated Crops in Dry Areas. Growing Legumes in Dry Areas. Growing Hay and Pasture Crops in Dry Areas. Growing Trees and Fruits in Dry Areas. Rotation in Dry Areas. Maintaining Fertility and Humus in Dry Areas. Livestock in Dry Areas.



PROF. THOMAS SHAW

The Water Supply in Dry Areas. The book is handsomely bound and beautifully illustrated and is sold at the low price of \$2.

It is published by the author, who lives at 2153 Knapp street, St. Paul. Prof. Shaw's book represents 50 years of agricultural work and experience in the Northwest. It is one of the most valuable books ever published and every farmer and business man should have a copy. Commercial clubs should interest the leading farmers of their community in this book.

"Dry land" is defined as any section where the rainfall is less than 25 inches per annum.

Prof. Shaw's book will be read with more interest than the most thrilling of the "six best sellers" by the farmers of the dry land areas and by thousands of Easterners who are planning to come to the Northwest. It is the opinion of Prof. Shaw and other agricultural experts that a modified form of dry farming will eventually be used on all lands not artificially watered or irrigated where the rainfall is less than 25 inches per annum. Even where there is heavy rainfall there occur dry periods in the late summer, when if the soil moisture were conserved the failure of crops would be almost unknown. In the Northwest the dry land area extends from a point west of the Mississippi river to the Cascade mountains which are barely 100 miles from the Pacific Ocean. The dry land area extends from the heart of Canada south to the interior Mexico and from the Cascade and Sierra Nevada mountains east as far as the Mississippi river.

CHURCH NOTICE.
Services Sunday, February 18, at 11 a. m. and 7:30 p. m., conducted by Rev. Dr. Gorby, at the Baptist church. Morning subject, "The Future Life, Heaven and Hell, Where Are They and Who Made Them?" Evening subject, "What is the Unpardonable Sin, Who Commits It, When and How?"

Neighborly Advice.

A little Neighborly Advice ought to put you on the right track for Good Block Wood at \$4.50 per cord and Good Limb Wood at \$4 a cord.

Others buy of me, and for that reason, no doubt, are getting better wood than you. I make it a point to sell only the best of wood and at reasonable prices. Give me a single trial and prove this to your own satisfaction; and do it now, before the last stick of wood is burned. Orders filled promptly.

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MEASURING A RIVER

Simple Method Described for Determining the Volume.

The United States Geological Survey frequently receives letters inquiring for some simple method of determining the approximate flow of streams or small rivers. It is believed that the following instructions may be of some value to those who for any reason wish to determine the velocity or volume of a stream.

To ascertain the velocity of the stream choose a place where the channel is straight for 100 to 200 feet and has a nearly constant width and depth; lay off on the bank a line 50 or 100 feet in length, marking each end; then allow small chips to float down the stream, by one of the methods described below, noting the time required for these to traverse the distance laid off on the bank. The surface velocity in feet per second is obtained by dividing the distance in feet passed over by the float by the time in seconds it takes the float to travel this distance. The average of several such determinations will give the mean surface velocity of the stream. This result multiplied by the coefficient 0.80 gives very nearly the mean velocity of the stream.

To obtain the area of the cross section of the stream, stretch a tape from shore to shore and take the depth of the stream at intervals of 2 to 5 feet. The average of these depths may be assumed as the mean depth of the stream. The average multiplied by the total width will give the area of the cross section of the stream in square feet.

The discharge is found by multiplying this cross-section area by the mean velocity, as obtained by the float measurements, the result giving the discharge in second-feet, or, in other words, the number of cubic feet flowing past the point of measurement each second.

In determining the velocity for small streams and when only approximate results are desired the float is placed in the center of the stream only. For larger streams and when greater accuracy is desired a tape is stretched across the stream and the distance between the banks is divided into a number of equal spaces or sections. Floats are then allowed to drift down the stream as near as possible in the center of each of these spaces, the same number of floats being used for each section. The mean surface velocity is then assumed to be the mean of the surface velocities obtained for the several sections. For each float the distance of its starting point from the right bank is recorded as indicated.

Going Fast.
Those lots in Center Addition. A few choice ones left at very reasonable prices and terms. Two of the best residences in Bend being built on adjoining lots. Ryan & McGillivray Postoffice corner. 7t

NOTICE FOR PUBLICATION

Not Coal Land.
Department of the Interior, United States Land Office, The Dalles, Oregon, January 31st, 1912.

Notice is hereby given that James Ryan, assignee of Archibald Campbell, whose postoffice address is Bend, Oregon, filed in this office this 21st day of July, 1911, (under 2306 R. S.) his application to select the SE 1/4, SW 1/4, Sec. 20, township 17 south, range 12 east, Willamette Meridian, Serial No. 09334.

Any and all persons claiming adversely the lands described, or desiring to object because of the mineral character of the land, or for any other reason, to the disposal of applicant should file their affidavits of protest on or before the 16th day of March, 1912.

C. W. MOORE, Register.

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March 1 to April 15, 1912

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Wm. McMURRAY
General Passenger Agent, PORTLAND, ORE.

NOTICE FOR PUBLICATION

Department of the Interior, U. S. Land Office at The Dalles, Oregon, February 1st, 1912.

Notice is hereby given that Charles W. Thornwaite, of Tumalo, Oregon, who, on September 9th, 1904, made homestead entry, No. 13787, serial No. 03297, for sec 14, section 19, township 16 south, range 11 east, Willamette Meridian, has filed notice of intention to make final five year proof, to establish claim to the land above described, before H. C. Ellis, U. S. Commissioner, at his office at Bend, Oregon, on the 14th day of March, 1912.

Claimant names as witnesses: Grover G. Pulliam, Frederick W. Leverenz, Hubert A. Scoggins and Ellis H. Edgington, all of Tumalo, Oregon.
C. W. MOORE, Register.

NOTICE FOR PUBLICATION

Department of the Interior, U. S. Land Office at The Dalles, Oregon, January 29th, 1912.

Notice is hereby given that William J. McGillivray, surviving husband, and administrator of the estate of Charlotte E. McGillivray, (deceased) assignee of Sarah Ferguson, of Bend, Oregon, who, on March 14th, 1905, made Desert Land Entry No. 546, Serial No. 02325, for sec 14, Sec. 24, T. 18 S., R. 12 E. and 1/2 sec 14, section 19, township 18 south, range 13 east, Willamette Meridian, has filed notice of intention to make final desert proof, to establish claim to the land above described, before H. C. Ellis, U. S. Commissioner, at his office at Bend, Oregon, on the 11th day of March, 1912.

Claimant names as witnesses: Ernest Garratt, Ray A. McGillivray, Cora A. Brosterhouse and Charles D. Rowe, all of Bend, Oregon.
C. W. MOORE, Register.

NOTICE TO CREDITORS

In the County Court of the State of Oregon for the County of Crook in the matter of the estate of John W. White, deceased.

Notice is hereby given by the undersigned, the duly appointed and acting administrator of the estate of John W. White, deceased, to the creditors and all persons having claims against the said estate or said deceased, to present them duly verified as required by law, within six months after the first publication of this notice, to the said administrator at the office of his attorney, Vernon A. Forbes, in the First National Bank Building, Bend, Oregon, the same being the place for the transaction of the business of said estate in said county and state.

Dated this 8th day of January, 1912.
A. C. LUCAS,
Administrator of the estate of John W. White, deceased. 4-5

NOTICE FOR PUBLICATION

Department of the Interior, U. S. Land Office at The Dalles, Oregon, January 15th, 1912.

Notice is hereby given that Willard W. Lawton, of Gist, Oregon, who, on February 20th, 1911, made homestead entry, No. 08161, for sec 14, section 2, township 16 south, range 10 east, Willamette Meridian, has filed notice of intention to make final commutation proof, to establish claim to the land above described, before H. C. Ellis, U. S. Commissioner at his office, at Bend, Oregon, on the 24th day of February, 1912.

Claimant names as witnesses: Arthur H. Gertson, George W. Gertson, E. H. Young, of Tumalo, Oregon and Robert Davis, of Gist, Oregon.
46-50 C. W. MOORE, Register

NOTICE FOR PUBLICATION

Department of the Interior, U. S. Land Office at The Dalles, Oregon, January 18th, 1912.

Notice is hereby given that James A. Holmes, of Bend, Oregon, who, on December 22nd, 1910, made homestead entry, No. 07763, for sec 14, nw 1/4, sec 14, and nw 1/4, sec 14, section 18, township 20 south, range 11 east, Willamette Meridian, has filed notice of intention to make final commutation proof, to establish claim to the land above described, before H. C. Ellis, U. S. Commissioner at his office, at Bend, Oregon, on the 2nd day of March, 1912.

Claimant names as witnesses: William P. Vandevort, Peter Scoggling, James S. Smith, Cortez B. Allen and Martin J. Main, all of Bend, Oregon.
46-50 C. W. MOORE, Register.

HOTEL SEWARD

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NOTICE FOR PUBLICATION

Department of the Interior, U. S. Land Office at The Dalles, Oregon, January 29th, 1912.

Notice is hereby given that George Higginson, of Tumalo, Oregon, who, on October 13th, 1910, made homestead entry No. 07560, for sec 14, and 1/2 sec 14, section 18, township 16 south, range 11 east, Willamette Meridian, has filed notice of intention to make final commutation proof to establish claim to the land above described, before H. C. Ellis, U. S. Commissioner, at his office at Bend, Oregon, on the 16th day of March, 1912.

Claimant names as witnesses: Jonas L. Olson, Frederick W. Leverenz, Hubert A. Scoggins and Henry C. Schumacher, all of Tumalo, Oregon.
C. W. MOORE, Register.

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FRATERNAL SOCIETIES.

M. W. of A.
Pilot Butte Camp No. 9794 Meets every Tuesday in hall over postoffice. Visiting Neighbors always welcome. Z. W. Lindborg, V. C. N. P. Weider, Clerk.

Deschutes Lodge No. 103 K. of P.

Meets every Wednesday evening at 8 p. m. in Castle Hall, post-office Bldg. Visiting Knights welcome. Chas. D. Rowe, C. C. N. P. Smith, K. R. & S.

I. O. O. F.

Bend Lodge No. 218 Reg. Meetings every Monday night Visitors welcome O. M. Patterson, N. G. W. L. Wing, Secretary.

BEND LODGE No. 139 A. F. & A. M.

Meets on Thursday on or before the full moon of each month. Visiting brothers always welcome. J. D. Davidson, W. M. H. E. Allen, Secretary

FRATERNAL BROTHERHOOD.

Bend lodge No. 897 meets on the first and third Friday evening in the hall over the postoffice. Visiting brothers and sisters always welcome. U. N. Hoffman, President Sara M. Perry, Secretary.

ROYAL NEIGHBORS AMERICA.

Regular meetings every Thursday night. Visiting members of the order welcomed. Mrs. George S. Young, Oracle. Mrs. L. C. Fleming, Recorder.