

THE BEND BULLETIN

"For every man a square deal, no less and no more."

CHARLES D. ROWE, EDITOR

SUBSCRIPTION RATES:
 One year \$1.00
 Six months .60
 Three months .35
 (Invariably in advance.)

FRIDAY, JUNE 26, 1908.

A SOLUTION OF THE PROBLEM.

The most promising move for the development of Central Oregon that has been undertaken for many months is the project to build a railroad into this section by local and Portland capital. The business interests of Crook county and of Portland are tired of waiting for Harriman or some other large system to provide transportation, and, working on the basis that "God helps those who help themselves," they have decided to wait no longer but to build the road themselves.

The success of the undertaking is assured. Behind it are practically all the prominent business men of this section, and the people will certainly fall in line and help as much as they are able. If Crook county gives a reasonable support Portland will provide what is further needed to finance the undertaking. There is not the slightest doubt but that Crook county will make good with its share, Portland will do likewise, and the road will be built.

The entire plan is a simple proposition. As one of the chief promoters said to The Bulletin: "There is not a trace of high finance or humbuggery in it. It is entirely simple and open." It is proposed to take subscriptions for the preferred stock in Crook county. These subscriptions may be paid either in timber for ties, bridges and culverts; in produce for the feeding of men and teams on construction; in labor, or in cash. Under this plan there are hundreds of men throughout Central Oregon who should and will be glad to take their teams and work on the building of the railroad. The increase in the value of their land that the railroad would insure would be ample pay for the time and labor expended. But they are not asked to donate anything. Instead, they will be given the preferred stock of the company bearing 7 per cent. interest. Crook county should raise easily the equivalent of half a million dollars for this undertaking.

The men who are behind this work are not building the road to make millions out of it in a stock-watering, high-finance manner. Their object is to provide railroad transportation for this immense inland empire that is so rich in resources. The development that will follow the coming of a railroad will provide them with their profit. They ask for the assistance of the people because it is needed.

We who live in Central Oregon have unbounded faith in its future. We have faith because we can see its wonderful resources and the development that is certain to come. That development will never come until a railroad is built. The line now under consideration will give Central Oregon direct communication with Portland and will provide a ready market for all the livestock and surplus produce that this section can produce. Hence, it behooves everyone who has property or other interests in this section to put his shoulder to the wheel and help make the railroad a success. Let's show the world that Crook county can build a railroad itself.

The time for action is at hand. What are you going to do about it?

BETTER SCHOOL FACILITIES.

Bend people believe in education. And they believe in furnishing the means whereby proper education

may be provided their children. There has been a steady and rapid advance in the efficiency of the Bend school from the time the district was formed to the present, and the recent action of the school board indicates that that record shall be continued. The procuring of a teacher of science and German and the addition of the eleventh and twelfth grades to the school course, places the Bend high school in the rank of the best schools of the state, and there it shall be kept.

Bend's corps of instructors are of the best. This has been amply proven by the fact that on two different occasions two of these instructors have received the highest averages of any teachers taking the examination at the county institute, and also by the fact that the examination papers of the eighth grade of the Bend school, submitted to the county superintendent this spring, excelled those submitted by any other school.

An efficient school system is a strong feature in drawing a desirable class of citizens to a town. Bend is anxious for just that class of people, and extends a hearty invitation for them to come to Bend and give their children the advantages of our excellent school system.

Wanted.

Bids for finishing the northwest room on the second floor of the Bend school house. Size of room the same as the corresponding room on first floor (about 30x24 feet) to be finished with 6 inch No. 1 double beaded ceiling and 4 inch No. 1 flooring with noise deadeners. The room to be finished exactly as the corresponding lower room. Bids to be in by July 10 and work to be finished by Sept. 1, 1908. For further information call on members of the board or the undersigned. The right to reject any and all bids is reserved.

L. D. WIEST,
 Clerk School Dist. No. 12.

LADIES! You should have your calling cards printed at The Bulletin office. The latest styles.

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Problems That Confront The Irrigator.

The following paper on irrigation read recently at a farmers' institute at Aberdeen, Idaho, will be of particular interest to every man who irrigates, or ever has or expects to:

Irrigation means the supplying of water in the right amount at the right time. Water is the one element necessary to plant life which is under the control of man, and the good irrigator can control plant growth with as much certainty, almost, as he can the shape of his buildings. The man who does not understand something of plant growth can never become a good irrigator. Water must be applied in a scientific and rational manner, because it is the lever which controls production. Moisture, air, heat and plant food are the elements which control plant growth. Water is the vehicle which carries food to the plant. Descending into the soil it dissolves the chemical food elements, and rising by capillary attraction, carries that food to the plant. Bear in mind that it is not the water going into the soil, but that coming up that feeds the plant.

Plants should grow continuously from the time the seed sprouts until they mature. If they are supplied with moisture in the right quantity and in the right way, they will do so. If the soil is saturated with water to such an extent as to expel the air, the growth of the plant is checked. This is one reason why irrigation by the corrugation method, or in small trenches, is preferable to flooding. Bear in mind never to keep the soil saturated. Water in the soil forms in thin layers around the soil particles. If these particles are cubes with inch surfaces, there would be a film of water on all sides of the cubes. If this cube were pulverized, or changed to a powder, there would be as many films as there are soil particles. Then a fine soil will hold more moisture than a coarse soil, because there are more interstices to be filled. Ten per cent of moisture in these interstices and a balance of air is about the ideal proportion.

Thus good cultivation, in having the soil well pulverized, is an aid to good irrigation.

The roots of a plant are always larger than its top. That is, the roots extend further into the ground than its top above it. The roots may run along near the surface or may be made to penetrate deep into the soil. If the soil is kept wet when the plants begin to grow, their roots will keep near the surface. But if moisture is withheld, the plants will hunt for it, the same as an animal, and send their roots deep after it. The deeper the roots go the larger the feeding ground of

the plant, and the thrifter the plant will be.

Thus, by the application of water, the irrigator may benefit or injure plant growth. A plant with roots near the surface will require frequent irrigation. One deep rooted requires much less water. Thus by starting right the irrigator may either make or save himself work.

As between the corrugating or flooding methods, we prefer the former, for two reasons: A better and quicker distribution of water, and less liability of checking plant growth. In the corrugating or furrow method, furrows three or four inches deep, and two feet apart, should be made in the field immediately after planting, before the seeds sprout. These furrows readily conduct the water, carrying it across a field in much less time than when flooding is resorted to, and distributes the water more easily. The rise of an inch or two in a few square rods of ground is scarcely noticeable. Yet water cannot be forced upon such ground without impounding it by dams and making the low places too wet while the high ones are getting moisture enough to make the plants grow. Where a furrow four inches deep is made through such high places the water flows without interruption, and soaks in about 12 hours from one corrugation to another, leaving the surface generally dry, and supplying the water to the roots where it is needed.

The best results are obtained, in permanent ditches by placing spouts made by piling lath together, in the sides of the ditches to take the water from the ditch to the corrugations. One spout will supply two corrugations. These spouts should be placed in the side of the ditch, about one inch or so below the water level when the gates are closed. For instance, say the fall is two feet to the half mile, and your ditch 18 inches deep. If the gate were put in at the lower end of the ditch it would back water up only three-fourths along or across the field. But begin about 200 yards from the upper end of the ditch, and put in a gate that can be raised and lowered, not quite as high as the banks of the ditch, so that water will run over the head-gate or as many as are required. The greater the fall the more gates required. When you want water close the gates and raise the water above the spouts. When through, raise the gates, the water level falls, and the water harmlessly passes away. When ditches are constructed this way it is a pleasure to irrigate and requires little time.

In preparing your ground for irrigation (for permanent fields) do it right. If no more than 10 acres can be prepared in one year, do it right, because it will pay in the long run. Have your land level. By level is meant free from knolls, with a slope. Water cannot be made to run up hill. If the slope is too great run the corrugations around the slope in steep places or parallel with the ditches as near as may be necessary, instead of from it. A fall of an inch to a rod makes a good flood for corrugations.

If the field cannot be properly laid out without the services of an engineer it will be much cheaper to get one than to try and get along in a slipshod manner by attempting to drive the water where you want it with a shovel. Irrigating is easy where the ditches are properly laid out. Where they are not, it is slavery.

Unless the soil has moisture sufficient to bring grain up and keep it thriving until it is in the milky stage, irrigate before planting. Irrigate again in the milky stage, and with ordinary soil this should be sufficient to mature the crop. When the soil five or six inches below the surface will remain in a ball when squeezed in the hand it does not need water. If not, it is time to irrigate.

Mrs. S. L. Bowen, of Wayne, W. Va., writes: "I was a sufferer from kidney disease, so that at times I could not get out of bed, and when I did I could not stand straight. I took Foley's Kidney Remedy. One dollar bottle and part of the second cured me entirely." Foley's Kidney Remedy works wonders where others are a total failure.—C. W. Merrill, Druggist.

Organ Wanted.

For further particulars inquire at this office.

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Auction Sale.
 I hereby give notice that on Wednesday afternoon, July 1st, 1908, I will sell to the highest bidder for cash or for cash and with bankable notes, my entire property located in Secs. 6 and 7-16-11, consisting of cultivated irrigated farm with buildings and farm machinery, hay and miscellaneous personal property, all in good condition. Sale will be conducted by C. L. Gist, auctioneer, on the premises. Dinner furnished at Lew McAllister's for 25c a plate. Inquire at Gist postoffice if you don't know the place.
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