

get no smut, whether he treats or not. Thus oftentimes clean crops are credited to the vitriol when there was no smut on the seed to kill. However, a very smutty threshing machine may come along the next year and resumat all his clean wheat and then his troubles begin again.

"Vitriol can be used in such a way that it will kill the smut. To do this it is necessary to use a very weak solution (1 pound to 24 gallons of water) and to treat it for a very long time (12 hours.) The swelling of the wheat, which results with our soft wheats and the long time necessary for the process, makes this method prohibitive for the farmer who grows much wheat. There is a method of treating with hot water, called the Jensen hot water method, which is very effective, but it is too difficult for use by the average farmer. It also tends to swell out soft wheats.

The Formalin Method.

"The farmer must adopt a method which will kill the smut. This can best be done by the use of formalin. Formalin is a gas dissolved in water. It makes a colorless liquid which appears like water, but which has a characteristic odor. It can be procured at nearly all drug stores and should sell at 45 to 50 cents per pound in pound lots. It is used at the rate of one pound of formalin to 60 gallons of water. Make a trough as described above, about 12 feet long, 2 feet wide and 1 foot 9 inches deep, which will hold at least 20 bushels. Shovel in this wheat loose and stir it so that the wild oats and refuse matter float. Skim these off. Continue till the trough is nearly full, being sure that there is enough of the solution to keep the grain covered. Let it stand at least an hour and a half, and, better, two hours. Then shovel out the wheat and dry it on a clean floor or piece of canvas. If the floor or canvas has ever been contaminated with smut, clean it by scalding it with water. When the wheat is dry put it in clean sacks. Scald out your seeder with boiling water. Do not let this treated wheat touch live smut or it will again be contaminated.

"It will not be necessary for the state grain commission to take up the smut problem as Mr. Smith suggests, for the state and national law makes it the duty of the agricultural experiment station to investigate the causes of and to seek to discover remedies for fungous diseases. It has been working upon smut for some time. Its price was comparatively low. He its first publication on the subject was in bulletin 8, published in 1893, which bulletin is now exhausted. The greater part of the work has been done during the last two years. Last spring a short bulletin upon the subject was issued and another is now in press.

We invite every farmer interested in the smut problem to write freely to the Washington Agricultural Experiment station, Pullman, Washington, and tell us his difficulties and successes. We will do all that we can to help anyone who may apply. The station is beginning a smut campaign which will be continued until the smut is practically all driven out of this country. We would be glad to hear of successful or unsuccessful methods in use anywhere.

Anyone interested in the smut question is invited to send for our bulletin, which is just being issued.

R. KENT BEATTIE,
Ast. Botanist, Wash. Agri. Exp. Sta."

LUTE WILCOX SAYS:

The dark side of ranch life is not any worse than that of any other kind of life. The city attracts by the light, bustle, gaiety and amusement and the bright side is supposed to represent it all. However, the dark side of city life is darker than anything in the country, and the battle of life in the city is often a prolonged struggle for mere shelter and food. A little more light in the houses and a little more amusement amongst the families of the farmers and they will find themselves without any dark side at all.

One of the greatest mistakes made by farming communities intending to develop the beet sugar interests of this country is that they become over-enthusiastic in many cases. They see a gold mine ahead without considering the numerous struggles necessary in order to reach the goal they have in view. Sugar-beet culture means more work and botheration than the average tiller appears to appreciate, notwithstanding the efforts of promoters officially representing the interests of sugar factories, etc.

The business of herding live stock on the range will always prove profitable to young men faithful in the work. Skilled herders are always in demand and good wages will be paid to them. When a young man has proven his worth in the herding business, owners of live stock are often willing to give them an interest in one form or another in the business and in this way they are enabled to get a start on their own account. Some of the heaviest cattle owners commenced business as common herders. Of course young men who are inexperienced may find difficulty at first in getting a place, but even if they have to give their services for their keep for a few weeks or even months at the start, it might prove a good investment in the end.

The Seattle Conservatory of Music, whose advertisement appears in another part of this paper, has secured about one-fifth of the space in the huge new Arcade Building, Seattle. This conservatory is founded by Prof. Zimmerman and Prof. Arthur, two of Seattle's most prominent musical instructors; the first vocal, the latter violin. Without question the new institution will give satisfactory instruction and it will pay our readers to write for a catalogue.

Our long-time advertisers, Carley Bros., manufacturers of improved feed mills at Colfax, have had quite a boom in their business this fall. Glad to hear it. They try to do about right with their customers.

Old process oil cake meal, manufactured by the Portland Linseed Oil works, Portland, Ore., is pure and reliable. It is just what is needed to add to skim milk for calves. It is a profitable addition to the feed of all livestock.

The Puget Sound Supply Company, who are located at 732 Post street, are building up a splendid exclusive mail order business. They have just issued a new catalog for free distribution.

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Prof. A.—"Do you think he has really mastered the subject?"

Prof. B.—"Oh, my, yes! He has gone so far in it that all the conclusions he has reached are practically useless."



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This is the best day the world has ever seen. Tomorrow will be better.—
R. A. Campbell.

"Whenebber a man gibes me a whole lot o' advice," said Uncle Eben, "I can't help s'picionin' dat if his opinions was so valuable he'd be busy somewhere else countin' money.—
Washington Star.

Classified Wants

Advertisements under this heading 1c a word each insertion. Cash must accompany order.

POSITION WANTED—By Eastern butter and cheese maker, long experience. Dairy graduate. Address A. G., The Ranch.

For Sale—Small ranch outfit, including team horses, single and double harness, two wagons, plow, cultivator, four cows, fresh first of year; one thoroughbred Poland-China boar three years old, sow and litter of eight pigs. Will sell cheap for cash, or trade for Seattle property. Address: S. W. Baker, Ballard.

WANTED—Partner to engage in stock raising. Must be a practical man, thoroughly informed in all departments of the business. Address A21, care The Ranch, Seattle.

FOR SALE at factory price, one new 50-inch Kitzelman Bros. woven wire fence machine. For full particulars write or inquire of W. S. Danner & Co., 520 New York Block, Seattle.

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