IRRIGATING SEDIMENTS.

They Necessitate the Best Cultivation That is Possible.

The streams of the southwest carry unusually large amounts of sediments. particularly in times of flood. A recent bulletin of the Arizona experiment station reports a study of the fertilizing and physical effects of such sediments upon the soll. The most pronounced effect of the free use of irrigation water containing large amounts of sediment was found to be the formation of a silt blanket which interferes with the penetration of irrigation waters and in other ways impairs the physical condition of the soil. Experiments on the effects of these silt deposits on the growth of alfalfa were made during the summer of 1905 on three fields situated respectively under the Colorado, the Salt and the Gila riv In the case of the field on the Glia river the irrigation water used contained a large amount of mine tailings from the concentration of copper

The "Blanketing" Effect.

The results show in general a marked injurious effect from the accumulation of sediments in alfalfa fields, but like results from the use of water rich in sediments were not in general observed in the case of corn, barley and wheat. In the case of such crops the ground is cultivated in a manner impossible with alfalfa, and the sediment blanket is broken up, turned under and incorporated with the soil. In this way the blanketing effect is lessened or entirely done away with, and the sediments are left free to exert such fertilizing influence as they may pos-

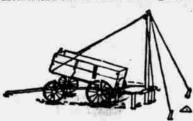
Mine Tailings-Settling Basins.

As compared with the natural sediments the mine tailings were of little or no fertilizing value and were fully as injurious from the standpoint of the physical properties of the soil. Certain injurious effects which have been popularly ascribed to mine tailare shown to be due to other causes, such as plant diseases of various kinds. It is believed, however, that sunburning of the crops, which is common throughout the southwest, is due largely to the use of turbid irrigating waters. It is stated that "It is probable that to an increasing extent settling basins will be found a necessary adjunct to irrigating systems in

A LIFTING DEVICE.

An Arrangement For Removing Wagon Box to a Platform.

There are various ways of removing a wagon box from the trucks, and in the following plan, described in Iowa Homestead one of these is brought out:



REMOVING THE WAGON BOX.

The upright pole is 4 by 4 by 14 feet and is set several feet in the ground, so that it will be firm enough in its position to stand the strain which is reguired of it. The platform on which the rear end of the wagon box rests when it is to be raised from the wagon may be made any height so as to suit the height of the trucks. Two guy wires should be attached to the pole a foot or so from its top and be secured eight or ten feet in the rear of the platform. The rope which is used to do the lifting is attached at one end of the upright pole near its upper end. From there it continues on to a pulley hooked in a rope which passes around the front end of the wagon box, then back over a pulley in the top of the pole and down to a windlass at the rear end of the platform. When the wagon box is in its final position on the platform, it should stand upright and should be left attached to the rope, so that it cannot be blown down in case of winds.

Experience With Manure Spreader.

experience with the manure spreader teaches me that the modern method of applying manure to land is far in advance of the old practice, says a writer in Farm and Fireside. In applying manure with the spreader it is put on uniformly, and all parts of the field are equally benefited. When the manure was dumped in piles, it frequently hannened that the work of spreading was postponed for some time, and the result was that much of the fertilizing value of the manure leached out or was lost through fermentation. The manure spreader not only saves the plant food elements of the manure, but also saves time and labor, as the work is all done at one time. It does two very important things and does them well-it thoroughly fines the manure and distributes it evenly.

Hornless Cattle.

The time will come when horned cattle will be bred only as curiosities or for show purposes, as fancy breeds of poultry are now. The advantages of the mulleys are so many that the horns must go. It is just as easy to breed cattle without horns as with horns, and it is a great deal easier to take care of them afterward.-Farm Press.

Apple Growing.

An authority states that the cause of many failures in apple growing may feet high to the lowest branches. Low headed trees are usually preferable. In a general way, pruning should be done frequently with knife and thumb

BEST DAIRY CROP.

Grass Should Figure Largely, but Not Wholly, Says Gilbert.

All grass, or nearly so, is consid by many to be the correct crop for dairying. Certainly grass should figure largely, but farms wholly grass are not the most economical. A not uncommon idea is that as long as a cow gets plenty of grass in summer and hay in win ter that is all, or nearly all, that is needed, but experience soon shows that such is not sufficient, My own idea of cropping a dairy farm is three parts grass and one part alfalfa, roots and grain, and if I had to alter this I should be more inclined to increase the arable rather than reduce it, writes W. R. Gilbert in American Cultivator.

Some depend a good deal upon buying meal, etc., for feeding the cows, growing a good deal of grain for sale and utilizing the straw. I cannot say that I like this way. Grain growing is not so profitable as milk producing. and the successful dairy farmer gives all his first consideration to his cows and grain growing is a secondary matter. No well doing they farm can be carried on without a winter supply of roots or ensilage and straw. All ought to be produced on the farm. They can be so obtained more cheaply than if bought, and it is much more profitable to feed them than to sell. Indeed, the greatest economy and the highest profits result from home production and home consumption.

Best Hay For the Cows. Cows should have the best hay, so that it is false economy to sell the bay because it may happen to fetch a big price and feed with second rate stuff. That grass and hay are indispensable to rural dairying is quite clear, but so are also mangels and straw, while alfalfa, cabbage and other things are a decided advantage. I mention alfalfa presuming that it is not included in

the grass, which it should be. A good patch of cabbage is most use ful as the grass declines in the fall and a quantity of kohlrabi to succeed these and to use before the mangels. These later are an important crop on all dairy farms. Indeed, they are well nigh indispensable, and to keep land in grass and buy mangels would be a profitless absurdity. The roots should be home grown and abundant. The growth of oats in grains might be favored, as crushed oats are a capital milking food, and, as a substitute for hay, oat straw is good feed. Oats should therefore be grown on all dairy farms. If not needed as food, the straw is as valuable as any other for manure making and bedding.

Clover and rye grasses are less use ful than meadow hay. Tares and vetches are excellent for late spring and early summer feed and should occupy more or less space on every dairy farm. Rye, too, is invaluable in coming in early as a luxuriant and succulent crop at a time when hardly any other kind of green crop is avail-

Buying New Feeds.

The buyer should be very cautious concerning new feeds and should ascertain their feeding value before purchas ing. The addition of a cheap filler to standard feeds is getting to be altogether too common a practice. A dairyman should keep his eyes open and mental faculties on the alert, otherwise he is likely to pay \$25 for \$20 worth of nutriments and have only himself to blame for the bad investment.-Dr. J. B. Lindsey, Massachusetts Experiment Station.

Dairy Wisdom In Brief

Excitement or noise among the cows is costly. Cows are nervous animals, and they resent any noisy inter-

Do not forget the salt. Do not mix it with the grain ration either. The cows like it straight,

If you guess about your cows, you will guess about your profits-and guess wrong.

Don't forget that the calf of today will be the money maker or the money loser tomorrow.

Feed the farm by the way of the good cow. Feed her right, and she will feed the land and everybody on it. If the calf is hand fed, the milk should be given it at blood heat. Cold milk is likely to cause indigestion. scours and kindred calf ailments. If too hot, the milk will scald the calf's mouth and interfere with the eating. Selection and breeding go together in

building up the dairy herd. A sore teat (the sore may be inside) will cause a cow to kick, but if handled gently she will be quiet and kind

when cured. Have scales in the stable and weigh each milking. Get the milk tested and raise calves for dairying from calves

Fewer cows are injured by high feeding than by unbalanced feeding. A clean cow and a clean stable go with clean milk, good butter and clean

The best way to bring cream to the cream is of the proper temperature.

of the American cow.

you know it by squirming about when chemically pure dried sulphate of iron you are milking and maybe by upset. in his bran, flour and oats three times ting things. Take time to trim your a day until you see a change for the mails once in awhile,

SILAGE FOR HORSES.

Many Breeders Using It as a Feed With Good Success.

I know silage is a good feed for lorses, for I have tried it. I have not, however, fed to any great extent because I did not have as much silage as wanted for both cows and horses. I thought more of my cows than I did of my horses, so the cows had all they needed and the horses had to go short. One winter we had a brood mare that was fed silage all winter, probably twenty pounds a day. She had some hay and straw to go with it and no grain except what was in the sliage, and she came out fat and with a glossy coat in the spring and had a fine, healthy colt. Horses like silage as well as cattle do after they are accustomed to it.

Fed Silage Exclusively.

A man in Michigan a few years ago wintered 200 ho as on silage and straw exclusively, with no grain. They came through in fine shape, and the brood mares all had fine, strong colts. The Ohio experiment station tried feeding horses on silage through the winter and reported that they came through until spring in the best of condition

W. C. Bradley of Wisconsin says that one year during spring work he was out of hay, and the only coarse fodder his horses had during all that period of hard work was silage. He says that the horses never stood work better .-C. E. McKerrow in Spirit of the West.

Care of Work Horses.

Many persons after driving their teams in the slush and mud think if they dash a few pails of water over the horses' limbs upon returning they have left the poor brutes in the best possible condition until morning. The fact is it would be far better to turn the animals into the stable and leave them, mud and all, until their legs are fully dry. There would be less danger of scratches, mud fevers and grease heels than by the plan of washing. the legs are washed they should be rubbed quite dry, which is no easy task. If left partially dry the most serious consequences are likely to follow. When a team is left with the hair partially dry a chill is sure to ensue. It is not unlikely the animals, especially if exhausted, will be found the next morning stiff, with the limbs swollen, since the exhaustion of the system prevents healthy reaction at the swollen extremities. - Agricultural Epitomist.

THE VETERINARY.

Lice on animals indicate bad management. Horses or cattle in good condition seldom are afflicted with lice, but a low condition of the animal, the skin being hidebound, affords excellent inducements for lice. Good feed and the use of a brush will rid animals of parasites.

Treatment For Ringworm.

A New York breeder has several cattle that have a skin disease. It affects them around the eyes and neck, causing a whitish thickening of the skin. This is ringworm and is best treated by applying tincture of iodine to the parts with a feather or small brush. Repeat in a week if needed.

Cure For the Lampers In reply to the question, "Will you please send remedy for my mule and horses?-they have what I call the lampers; their gums are swollen and they do not eat"-the veterinary of the Kansas Farmer says: If possible get your horses and mule to eating ear corn, and this will be sufficient to cause all the irritation necessary to the roof of the mouth to cure the lampers. If you cannot get the animals to eat the corn take a sharp penknife and irritate the roof of the mouth.

A Remedy For Boils.

The veterinary of the American Agriculturist gives the following remedy for a horse that is troubled with boils Mix one ounce each of acetate of lead and sulphate of zinc with one quart of water, shake up and apply a little to the boils twice a day; also mix four ounces each of nitrate of potassium and sulphate of iron. Divide into twentyfour doses. Give one twice a day in bran mash until all are taken. above quantity can be repeated if

Hair Disease In Horses

In reply to a breeder who writes, 'We have a four-year-old horse which seems to have some hair disease which causes the long hairs in its tail to break off and fall out, the trouble being first noticeable about twelve months ago," the veterinary of Western Life says: Do not brush tail. Take green soap and wash tail well. Then apply a bandage. When dried, take just a little sweet oil and moisten the hair for ten days, then wash again. Keep the tail clean and see that horse does not

rub it. Scouring In Horses. Scouring in horses is sometimes due to indigestion, nervousness and a conproper temperature is by putting the stitutional weakness. If from the forcream can into a pail or tank of very mer, it is easily obviated by care in warm water. Stir gently until the feeding, etc.; if from the latter cause, it is very difficult to overcome, says the In some cases, where cows have been Horse Breeder. Have his teeth put in milking for a long time, there is some order and feed him only upon such difficulty in churning. The addition of food as is easily digested. Commence one or two fresh cows in the milking by giving him his water first, then hay herd will often overcome the difficulty, and lastly his grain. If he bolts his We cannot all buy pure breds, but food, procure a slow feed manger and we can improve the herds we already place several small stones in it, so as owa, and ten years of systematic to compel him to eat slowly. Give him breeding will nearly double the value water sparingly during the day, but plenty at night. Do not let him fill Did you know that if your finger himself full of water just before going nails get too long some cows will let out and give him a tablespoonful of

on. vesterday, that more flowers had never been seen at a funeral in this city than were banged in the M. E. church yesterday morning, at the servic's her for the late Arthur Belknap. While the seeron is early, probab y a full wagon load of exquisite floral pieces and bouquets were in the church. Resolutions of condolence and grief were read during the service by the Epworth League, of which deceased had two years served as president, and by the Amicitian literary society of OAC, of which he had been nember since 1900. The League atten i ed in a body, as did the Ami. itian socie-

The remark was made by many a per-

who also deeply feel his loss Next Sunday is the time for the third quarterly conference for the Corval is charge of the M. E. church, South. Rev. C. L. McCausland, P. E., will preach

ty and the public school teachers, Miss

Francis Be knap, the sister, being a

teacher. The deepest sympathy is ex-

near and dear friends of the young man,

For Stomach Sufferers.

Mi-o-na is the one remedy too stomach troubles that published its formula: chemically pure bismuth subgallate, to allay any indammation of the st mach and bowels; cerium oxalate, to strengthen the stomach nerves; sodium ni-carbonate, to neutralize the poisonous acids that are present in stomach troubles; and nux vomica, which restor s vigor to the digestive organs and times up the whole nervous system

This combination of valuable remedies is for a only in Mi-o-na stomach tub ets. and two rarely fails to strengthen the digestive system, and cure even the worst form of stomach trouble, that Graham & Wells sell the remedy under guarantee to refund the money unless it sur-s.

Women Who Wear Well.

It is astonishing how great a change a few years of married life often make in the appearance and disposition of many women. The freshness, the charm, the brilliance vanish like the bloom from a peach which is rudely handled. The matron is only a dim shadow, a faint echo of the charming maiden. There are two reasons for this change, ignorance and neglect. Few young women appreciate shock to the system through the change which comes with marriage and motherhood. Many neglect to deal with the unpleasant pelvic drains and weakwhich too often come with mar riage and motherhood, not understanding that this secret drain is robbing the check of its freshness and the form of its fairness,

As surely as the general health suffers when there is derangement of the healt of the delicate womanic organs, so surely when these organs are established in health the face and form at once witness to the fact in resewed comelmosts. Nearly a million women have found health and happiness in the use of Dr. Pierce's Favorite Prescription. It makes weak wom en strong and sick women well. Ingredi ents on label-contains no alcohol harmful habit-forming drugs. Made wholly of those native, American, medic-

wholly of those native, American, medicinal roots most highly recommended by leading med all authorities of all the several school of practice for the cure of woman's peculiar aliments.

For nursin "mothers, or for those brokendown in hea in by too frequent bearing of children, a! J for the expectant mothers, to prepare 'he system for the coming of baby and making its advent easy and almost pain'uss, there is no medicine quite so good as "Favorite Prescription." It can do no harm in any condition of the system. It is a most potent invigorating tonic and strengthening nervine nicely tonic and strengthening nervine nicely adapted to woman's delicate system by a physician of large experience in the treat-ment of woman's peculiar allments.

Dr. Pierce may be consulted by letter free of charge. Address Dr. R. V. Pierce, Invalids' Hotel aud Surgical Institute, Buffalo, N. Y.

Lincoln In Prophetic Mood.

"It was on the 5th day of July, 1863," General Daniel E. Sickles said recently, "that I was brought to Washington on a stretcher from the field of Gettysburg. Hearing of my arrival, President Lincoln came to my room and sat down by my bedside. He asked me about the great battle, and when I told him of the terrible slaughter the tears streamed from his eyes. I asked him if he had doubted the result. He said, 'No.' Then he continued: This may seem strange to you, but

a few days ago, when the opposing armies were converging. I felt as never before my utter helplessness in the great crisis that was to come upon the country. I went into my own room and locked the door. Then I knelt down and prayed as I had never prayed before. I told God that he had call- ton, Polk and Lincoln Counties; ed me to this position, that I had done \$1. all that I could do and that the result now was in his hands; that I felt my own weakness and lack of power and that I knew that if the country was to be saved it was because he so willed it. When I went down from my room, I felt that there could be no doubt of the issue. The burden seemed to have rolled off my shoulders, my intense anxiety was relieved, and in its place came a great sense of trustfulness, and that was why I did not doubt the result at Gettysburg. And, what is more, Sickles,' he continued, 'I believe that we may hear at any moment of a great success by Grant, who has been pegging away at Vicksburg for so many months. By tomorrow you will hear that he has won a victory as important to us in the west as Gettysburg is in the east.'

"Then, turning to me, he said, 'Sickles, I am in a prophetic mood today, a near Albany; \$700. and I know that you will get well."

"The doctors do not give me that hope, Mr. President,' I said, but he answered, cheerfully, 'I know you will get well, Sickies.' "-New York Sun.

AN ELOQUENT STORY.

No Need of Comment, It Speaks For itself.

That the small farm will not only make a living for a family in the Wiliamette valley but that it can be made to make good money is plainly shown by the experience of H. Wunder whose farin consists of only 45 acres, and lives in the hill district beyoud Monmouth, says the Independence Westside, Mr. Wunder works with his head as well as with his hands and tries to tended the bereaved family and other get the full benefit from the little farm.

Just now he is selling spring chickens and has been doing so for some time. They net him 35 cents each, dressed. He takes orders for them one week and delivers them the following week. He started to raise them in the fall and has them on the market before spring fairly opens, thus obtaining the best prices. He is paying more attention each year to this method.

The cash receipts of the farm last year were as follows; Fat hogs sold Stock hogs and sows sold 260 180

Cream from six cows Calves Eggs Chickens Grain Hay Prunes Apples

> Total cash receipts 250

50

30

100

35

300

Increase in stock Living expenses Total

1521 Considering the living expenincrease in stock at \$250, which are fair estimates, gives a gross return from the farm of over \$1500.

The farm consisted of 45 acres out Mr. Wunder had 15 acres rented last year which should be taken into consideration. About 37 acres put in grain, 15 acres put in hay, 5 acres are in prunes. and I acre in apples, cherries, etc. From 250 to 300 chickens are kept by the family.

These retuins certainly indicate the possibilities of the small farm in the Willamette valley and doubtless there are many others that are making an equaly ly good showing.

Real Estate Transfers.

M M and E W Arnold to H H and Nettie Glassford, tract size of one lot in Corvallis; \$1400.

R L and C H Sabin to Fred Duncan, 160 a near Summit; \$1. Fred Duncan to L C Cox, 160 a near Summit; \$10.

Chas H Everett to W F Gay, lot 6 in block 4, Dixon's Add to Corvallis: \$1.

L L Taylor to Edgar A Blake 40 a near Wells; \$1000.

Charlotte Polly and hus to W P Taylor, 1/4 a in Alsea; \$1. C C. Johnson to C F Kempkin,

1431/2 as of Philomath; \$4050. Marshall C Miller to W A Wells, lots I 2 II and I2, block 27, Avery's 2nd Add Corvallis;

Dan McClain to Martha Hay, 10 a near Monroe; \$200.

A Kyle to E McKennan, lots I and 2, block 10, Wilkin's Add Corvallis; \$500.

The Coast Land and Livestock Co to O B Durral, 3918 a in Ben-

L J and Samuel King to S L Kline, lots II and 12, block 18; Corvallis; \$10.

Geo Jones to M B Rankin, 40 a in Alsea; \$900.

J D Whiteaker to M B Rankin 80 a in Alsea: \$1200.

I A Veness to M B Rankin,

3265 a in Benton Co; \$1. C E Ireland to M B Rankin,

320 a in Alsea; \$1. JS Cooper to M B Rankin, 160 acres southwest of Philo-

J W Writsman to R Mishler, 8

math. \$1.

C H Barnell to I M Howard, e 1/2 of lots 7 8 and 9, block 22, Co Add Corvallis; \$1500.

J W Simpson to Erma Hol- very pleasant one.

royd, lots 5 and 6 block 19, Dixon's and Add to Corvallis: \$525.

Ben Olson to Hiram Parker, 16) a uear Blodgett; \$1800.

T C Sparkman to Charles Bunnell, lots 7 and 8, block "E," Avery's Add to Curvailis; \$450.

Additional Local.

A. J. Matzger returned the first of the week from Portland. He has been ill for some time but is able to be at the store again.

M. V. Weatherford, Carl Clark and Royal Seileck returned yesterday from Pullman, Wash., where they met the W. S. C. in debate, Monday night.

A Michigan mother broke her arm the other day wnile spanking her son. In her case it must have been true that it hurt her more than it did the bay .- Ex Mrs. Gertrude McElfreeh has been

visiting in Corvallis the past few days, having came up Wednesday with the Beiknap family on their return with the remains of the late Arthur Belknap. Bert Stevens, who has been employed

as floor manager at the Corvallie skating rink ever since it opened, is to resign the position tomorrow and return to his home in Albany for a vacation. The last of Jone he goes to Jamestown and later enters college at Annapolis.

The big track meet between Pullman and OAU occurs on the local field, Monday afternoon. It will doubtless attract a good crowd. The boys have been practicing faithfully and there is no doubt that the contests will be worth seeing.

Preaching at the Presbyterian church. Sunday morning and evening by the pastor, Rev. J. R. N. Bell. Morning topic, "The Transfiguration-An Epiphany;" evening topic, "The Millionaire.". All made welcome.

A week from Monday is the city election. Have you given the matter any serious thought? If not, it is up to you to do so. Elect men who are progresses of the family at \$300 and the sive, public spirited, upright and energetic, so that Corvallis may receive the benefit of their services in the administration of city affairs, which means your affairs.

Mr. Nevins of the Corvallis & Eastern states that several changes in agents have been made along the road. At Summit, C. E. Allen, formerly assistant agent at Corvallis, has been appointed agent, and Mr. Peterson, who has been seent at Philomath, has been assigned to the agent's position at Toledo. Mr. Shupp. formerly of this city, is now the new agent at Philomath.-Herald.

Patrons of the Corvallis skating rink are promised a treat tonight and tomorrow night, when Matthew and Putnam, the noted fancy skaters, are to give exhibitions. Instead of the usual sessions from 7:30 to 9:30, and from 9:80 to 11:80, on these two evenings there will be on long session, from 7:30 to 11:30. exhibition begins at 9 o'clock. The will no doubt be a large attendance to see these exhibitions.

Washington State College (affirmative) won the debate here tonight with Oregon Agricultural College, securing a unanimous decision, says a Pullman dispatch in the Oregonian. The question was: "Resolved. That the United States aban. don the principles of the Monroe doctrine as a part of the permanent foreign policy." The judges were Rev. W. H. Fry. of Moscow; Protessor Solen, of the University of Idahe, and Rev. Dr. Hays, of Pullman- Winning orators were: J. L. Thayer, A. E. Price and J. W. Brisslawn. The Oregon speakers were C C. Cark, R. R. Selleck and M. V. Weatherford.

On May 17, Oregon's track season will begin, says the Register. On that date the strong track team of the Washing. ton State college, at Pullman, will compete with Captain Moore's men. At the present time it does not look like Oregon will have an easy victory. The varsity has a strong team; Pullman's team is not weak and in some events it is stronger than the local varsity. It will be a

Persons having large tracts of land suitable for colonization purposes should address the Oregon Davelopment League at Portland, giving full particulars. Large capital and active men are willing to colonize Oregon just as they have Canada, Texas and other states, but it is absolutely necessary that they should have iron clad options, good for from 12 to 24 months. Every effort made heretofore has failed for the lack of this option.

Rev. J. R. N. Bell and family were tendered a reception at the Presbyterian church, Wednesday evening, about one hundred guests being present. There was a program that included a duet by Mrs F. L. Miller and Mrs. M. S. Woodcock; solo, Janet Blackledge; duet, Mrs. Harold Woodcock and Ethel Higdon: reading, Laura Pratt; solo, Lulu Spangler; solo, Gertrude McBee, and other features. Prof. Horner gave an interesttalk to which Rev. Bell responded in his usual happy manner. A social time was enjoyed and light refreshments were served. Rev. Bell and family have met with a hearty welcome from Corvallia people and the reception was planned to give others an opportunity to meet and know the family. The occasion was a