

COAL MINE ACCIDENT

Men Were Imprisoned by a Sudden Cave-in.

MEANS OF RETREAT CUT OFF

Men Were Propping Up the Roof when the Accident Occurred—The Work of Rescue Has Commenced

Wilkesbarre, Pa., June 30.—While ninety miners were at work in the Ash vein of the twin shaft at No. 3 o'clock this afternoon the roof caved in, and it is believed that all of the imprisoned men are English speaking miners, the others forty Poles and Hungarians.

When the accident occurred the work of rescue has commenced. The men were at work propping up the roof when the fall occurred. The roof was immediately given by the falling of fire bells, and rescuers were at work without delay. More than two-thirds of the victims were married men. Among them were Mayor Lanigan who was inside the mine, and Linward, a ward councillor.

About two weeks ago the surveyors reported to General Superintendent that the mine was squeezing, and unless steps were immediately taken to timber it, a cave-in or fall might be looked for. Superintendent lost no time, but at once put a number of timbers at work to brace the falling roof. The "squeeze" continued, however, and yesterday the situation became alarming. In the afternoon a slight fall occurred, and the men who were at work had to retreat to the surface.

A consultation of mine officers was held, and it was decided that the best measures would have to be resorted to prevent heavy damage to the mine. Inside Superintendent Lanigan gave orders that the most experienced miners should be secured, and that the party would go down into the mine at 7 o'clock. Expert timbermen put in an appearance at that hour, and were soon lowered into the workings. They made their way to Red vein, 150 feet down the slope. The work of propping proceeded rapidly until 11 o'clock, when another fall occurred. A low rumbling noise and the flying coal and debris drove the men back. Then the squeeze ceased again, and the men thought it was safe to resume work.

They labored on until 3:20 o'clock, when it is presumed the roof fell without warning, making a tremendous crash. It is said, however, that the men were not all together, but some were near the slope, and these probably ran up the incline when the fall occurred. This is the only way the finding of Mayor Lanigan's body in the slope can be accounted for. If the men received any warning, they had time to run to the slope, but not to any great distance. The falling rock and coal filled up the slope and the adjoining gang ways, completely shutting off all avenues of escape.

It was at first supposed the men escaped and that they were imprisoned behind the debris. It is still possible, however, that living men may be behind the fall, although it is extremely improbable. Even if they escaped being crushed by the falling rocks, the probability of their being alive for any length of time in a gaseous mine is remote.

Tidal Wave in Hawaii.

San Francisco, June 30.—The steamer Gaelic arrived from Yokohama and Hong Kong tonight, bringing the following news: A tidal wave reached Honolulu on the 15th. The wave commenced at 7:38 A. M.; at 7:45, the summit of the wave was reached. Rises and falls continued until 11 o'clock, showing fourteen noticeable waves in as many hours. The wave was quite severe on the island of Hawaii, at Kailua. On the Kona coast, the water rose to a height of twenty feet. At a small village on the coast, the water rose to forty feet. A number of dwellings along the shore were washed away, but no lives were lost. It is believed that the wave came from the northwest. These waves are a sure sign of volcanic action on some part of the shores of this ocean. They most frequently come from South America, though they have been caused by action in other places.

The Disgrace Too Much.

New York, June 30.—A special to the World from Batavia, N. Y., says: Jerome Rowan, a rich banker, the father of Lansing Rowan, the California actress who has challenged Corbett to meet her in a scientific sparring contest, committed suicide by shooting himself through the heart. By his side lay a copy of Saturday's edition of the Batavia Daily News, containing a dispatch announcing that his daughter had challenged Corbett. Mr. Rowan left a letter addressed to his wife, the contents of which she declines to make public. Mr. Rowan was 66 years old.

Killed in a Runaway Accident.

The Dalles, Or., June 30.—While coming into town this morning, a team driven by Irving Julean, became frightened at an oil-tank, and running away, dashed into a wagon containing Perry Watkins and William Marshall. The two men were thrown out, and one of the horses stepped upon Mr. Watkins's body, inflicting injuries from which he died two hours later. Marshall suffered a broken foot. Mr. Watkins was an old settler in Wasco county, coming here in 1868. He was 69 years of age.

RESCUE IMPOSSIBLE.

Unavailing Efforts to Bring Up the Entombed Miners.

Wilkesbarre, Pa., July 1.—It is a settled fact tonight that of the small army of men who entered the ill-fated Twin shaft at Pittston on Monday, not one survives. Not only is every approach to their dark tomb barricaded by enormous masses of rock and debris, but it is known that in the mine there is a large quantity of water, which is increasing in volume every minute. Thus the chances of recovering the bodies are more remote than ever.

Prominent officials say that weeks or months may be consumed in clearing away the fallen coal in order to reach the bodies of the victims. A mine superintendent of thirty-five years' experience thinks the unfortunate men have met the same fate that befell the twenty-six miners who perished in No. 3 slope of the Susquehanna Coal Company in December, 1889. The men were caught in a "rush" of culm and water from the surface. The bodies were buried under a mountain of coal refuse. Three hundred men labored for more than two weeks to rescue them, but the more debris they took out the more rushed in from the surface opening. As the task was a hopeless one, it was finally abandoned, and the portion of the mine where the men died was closed.

Excitement at the Twin shaft in Pittston, where nearly 100 miners are entombed, continues today. At the mouth of the shaft, besides the wives and children of the entombed men, there are hundreds of persons, not residents of Pittston alone, but visitors from Scranton and Wilkesbarre. The wives and children of the entombed men stand near the opening of the death chamber urging the rescuers to greater efforts.

Practically nothing has been accomplished toward the recovery of the men. There is scarcely an old miner about the opening of the mine who does not believe the men are all dead. The rescuing party which went into the mine at 1 o'clock came out at 7. The foreman reports that the timbering is going on as rapidly as possible. The work is necessarily slow, owing to the danger of falling rocks loosened by the explosion. It is hardly possible that the actual digging will begin before late this afternoon. If the slope is not completely choked with debris, the rescuers may possibly be able to reach the men within twenty-four hours. Otherwise it may be two or three days.

FELL INTO HOT WATER.

A Child Scalded in Astoria—Two Fishermen Reported Drowned.

Astoria, Or., July 1.—The infant son of T. Rackkone a fisherman of this city, met with a shocking death this morning. Shortly after the breakfast hour, the child's mother made preparations to give him a bath and half filled the bath tub with boiling water after which she left the room temporarily. A few minutes later the shrieks of the child were heard and hastening to the bathroom the mother found her child had fallen into the tub and scalded himself in a terrible manner. His injuries were such that medical aid was of no avail and he expired a few hours later.

A boat belonging to the Scandinavian Packing Company was reported to have been capsized in the breakers today at Peacock spit and the occupants lost. The accident was witnessed by the men in another boat but before the life-savers crew could be notified the breakers had added two more to their list of victims.

This afternoon, Roy Ferguson, a 12-year-old boy, fell from Exchange street to the beach, a distance of twenty feet, and had a miraculous escape from death. In falling the boy turned a complete somersault alighting upon his feet and escaping with a badly sprained ankle.

Jefferson's Granddaughter Married.

Bezzard's Bay, Mass., July 1.—Amid showers of flowers and under the spreading canopy of a large marquee erected on the most prominent and beautiful elevation of land on the shore of Buttermill bay, Miss Josephine, daughter of Charles B. Jefferson, and granddaughter of Joseph Jefferson, actor, and Charles J. Rolfe, son of William Rolfe, a Shakespearean scholar of Cambridge, were married today. There were about sixty guests, including Joseph Jefferson and Mrs. Cleveland.

Sawmill Boiler Burst.

Placerville, Cal., July 1.—A boiler explosion occurred at the sawmills of Snow Bros., about four miles from this city. The mill building was torn to pieces, but miraculously only one man of the four in the building at the time was seriously hurt. Daniel Kenirk, of this place, sustained injuries about the head, a broken jaw and a fractured hand.

A Pier Collapsed.

Boston, July 1.—The pier at Marine Park, used as a landing for ferry-boats that ply between City Point and Governor's island, was overcrowded today, and collapsed. There were more than 100 persons on the pier. Thirty were thrown into the water; twenty-eight were rescued, and two were drowned.

Christian Scientists Convicted.

Toronto, July 1.—Mrs. Beer, a Christian scientist, and David Goodson and his wife were tonight found guilty by a jury of feloniously neglecting and thereby causing the death of Adelaide Goodson, a daughter of the Goodsons. She died of diphtheria, having been under the care of Mrs. Beer.

General Amnesty for Cretans.

New York, July 1.—A special from Constantinople says that the sultan has accorded a general amnesty to the Cretans.

THE ARREST OF HARRISON

Our Friendly Offices Asked in the Venezuela Matter.

BRITISH REQUEST OF OLNEY

The Arrest of Harrison Is Not Considered a Very Serious Matter—Financials at Georgetown—Business Stopped.

Washington, June 29.—Secretary Olney received calls today from Sir Julian Pauncefote, the British ambassador, and Minister Andrade, of Venezuela, with both of whom he conferred separately concerning the arrest by the Venezuela troops of British Crown Surveyor Harrison, on the British-Venezuela boundary.

It is understood that Sir Julian, acting under instructions from the British foreign office, requested the friendly intervention of the United States toward securing the release of Harrison, as was done by the British authorities in behalf of the American, John Hays Hammond, during the Transvaal trouble.

Andrade was the first at the department, calling before the usual hour when diplomatic calls begin. He was with Olney some time, going over, quite fully, the circumstances of the Harrison incident. The minister said the affair had been magnified and was lacking in circumstances of serious indignity or wrong to the British. The exact nature of the British request was not made public, but its essential feature was the request for friendly intervention by the United States. Owing to the British-Venezuela trouble, the British have no minister or consul in Venezuela.

It is believed that Olney has already taken steps to communicate with the Venezuela government through the medium of the United States minister at Caracas. Ordinarily the first step of our secretary of state would be to seek to ascertain for himself, through our ministers, the exact facts, but in view of the peculiar relations of the parties, he might depart so far from ordinary methods as to precede this, in the present instance, with a request that Harrison be released and the status quo be thus restored to what it was before the arrest, it being understood meantime that there should be no advance on either side until the case can be settled soberly on its merits. No official knowledge of the arrest has been received at the Venezuela legation.

Financial Panic at Georgetown.

Georgetown, British Guiana, June 29.—The financial crash which has been expected since the boundary question dropped down upon the colony on top of the sugar depression, has come with full force. The British Guiana bank has been aided by the local government with £100,000, as a guarantee of the bank's liabilities, but still the £5 currency notes are being sold in many parts of the country for less than 4s.

A number of merchants are in trouble in consequence of the financial unrest. The incidental reason for the crash was the disappearance of Hugh Sproston, jr., probably the most important man financially in the colony. It is said he committed suicide by drowning, but it is also claimed he has simply left the colony. A run on the bank was started, and as the notes of the British Guiana and Colonial banks constitute nearly the entire currency of the colony, the government was obliged to guarantee the notes to prevent ruin to many, as tradesmen had begun to refuse the notes. It is feared the lull which now exists will be the forerunner of a greater storm. However, as the men who have been allowed to overdraw their accounts with the bank will be forced to either pay up or sell out when the accounts are straightened out, the opinion is that there will be a great deal of selling out. No business is being done.

Deported as Paupers.

Washington, June 29.—J. E. Reeves, solicitor of the treasury, decided today that the five Japanese women recently brought to the United States from Yokohama for the purpose of prostitution could be deported at the expense of the United States. The women were delayed at Port Townsend on their arrival there. The general immigration laws prohibit the entry of such women, but make no provision for their deportation. The case was referred to Washington by the collector at Port Townsend. Assistant Secretary Hamlin was of the opinion that the women could be deported under the contract-labor law, but when the matter was referred to Solicitor Reeves, he refused to dignify such women by classifying them as laborers, but decided that they could be classified as paupers, and as paupers sent back at the expense of the United States.

Wheelman in a Storm.

Chicago, June 29.—Letter Carrier Smith started Tuesday to break the Chicago-New York record, but when seventy-five miles out was caught in a storm and had to return. He left again today.

Awful Massacres Near Salisbury.

New York, June 29.—A World dispatch from Cape Town says: Awful massacres are reported near Salisbury, Matabeland. Murder and looting are prevalent in the unprotected districts throughout the country. A British patrol has just had a desperate fight with rebel natives. Seven troopers were killed and four wounded. Captains Bremer and Graham were among the killed.

The annual pension of \$5,000 granted by the French government to Pasteur, is to be continued to his widow.

PORTLAND MARKETS.

Business for the past few days has been very good, especially in a few lines. The termination of the fishermen's strike on the lower Columbia has been by no means a small factor in the improvement. Wool is beginning to move slowly, but this far has cut no figure in trade improvement. Potatoes, which have been the standby for many Oregon farmers for the past two or three months, are about marketed, and the price is daily declining. Strawberries and other small fruit now coming in freely are offsetting the vegetables, and placing considerable money in circulation among the growers.

Wheat Market.

The local wheat market is quiet and unchanged. A few carloads roll in each day from the Willamette valley or east of the mountains, but the bulk of recent receipts has been composed of grain purchased some time ago. Quotations are: Walla Walla, 50 to 51c; Valley, 53 to 54c per bushel.

Produce Market.

Flour—Portland, Salem, Cascadia and Dayton, \$2.85; Benton county and White Lily, \$2.85; Graham, \$2.80; superfine, \$2.25 per barrel.

Oats—Choice white, 26@28c per bushel; choice gray, 24@26c. Rolled oats are quoted as follows: Bage, \$4.25@5.25; barrels, \$4.50@7; cases, \$3.75.

Hay—Timothy, \$11.00 per ton; clover, \$6.00; clover, \$6@7; oat, \$5@6.50; wheat, \$5.50@6.50.

Barley—Feed barley, \$13.50 per ton; brewing, \$14@15.

Millet—Bran, \$14.50; shorts, \$15.50; middlings, \$18@20; rye, 90c per cental.

Butter—Fancy creamery is quoted at 25c; fancy dairy, 20c; fair to good, 15c; common, 12@14c per roll.

Potatoes—Burbanks, 40@45c per sack; Garnet Chiles, 40@50c; Early Rose, 50c; new, \$1.40 per sack; sweets, best, 4 1/2@5 1/2c per pound.

Onions—New, 7c per sack.

Poultry—Chickens, mixed, \$2.50@3.00; broilers, \$1.50@3; geese, \$5@6; turkeys, live, 12c; dressed 15@17c per pound; ducks, \$4.00@5.50 per dozen.

Eggs—Oregon, 11c per dozen.

Cheese—Oregon, 10c; California 9c; Young America, 10c per pound.

Tropical Fruit—California lemons, \$3.00@4.00; choice, \$3.00@3.50; Sicily, \$6.50; bananas, \$1.75@3.00 per bunch; California navel, \$3.25@3.50 per box; pineapples, \$3.50@5.00 per dozen.

Oregon Vegetables—Garlic, new, 10c per pound; artichokes, 35c; green onions, 10c; hothouse lettuce, 2c per dozen; Oregon peas, 2c; new cabbage, 1c per lb; tomatoes, \$1.75@2 per crate; rhubarb, 1 1/2@2c; asparagus, 6c; string beans, 9@10c per lb; radishes, 15c per dozen; cauliflower, 70@75c per dozen; Oregon, do, \$1 per dozen; cucumbers, 75c@1 per dozen.

Fresh Fruit—Tasmania apples, \$2.50@2.75; California, do, \$1.75; Oregon cherries, 50c@1 per box; gooseberries, 2@2 1/2c per pound; currants, 6c per pound; peaches, 75c@1 per box; apricots, \$1.

Dried Fruits—Apples, evaporated, bleached, 4@4 1/2c; sun-dried, 3 1/2@4c; pears, sun and evaporated, 5@6c; plums, pitless, 3@4c; prunes, 3@5c per pound.

Wool—Valley, 9c per pound; Eastern Oregon, 5@7c.

Horns—Choice, Oregon 2@3c per pound; medium, neglected.

Nuts—Peanuts, 6@7c per pound for raw, 10c for roasted; cocoon, 90c per dozen; walnuts, 12 1/2@14c; pine nuts, 15c; hickory nuts, 8@10c; chestnuts, 17c; Brazil, 12c; pecans, large, 14c; Jumbo, 16c; filberts, 12 1/2c; fancy, large, 14c; hard-shell, 8c; paper-shell, 10@12 1/2c.

Provisions—Portland pack: Smoked hams are quoted at 10@10 1/2c per lb; picnic hams, 7c; boneless hams, 7 1/2c; breakfast bacon, 10c; bacon, 7c; dry salt sides, 6c; lard, 5-pound pails, 7 1/2c; 10-lb, 7 1/2c; 5-lb, 7 1/2c; terrors, 7c per pound.

Hides—Dry hides, butcher, sound, per pound, 11@12c; dry kip and calf-skin, 10@11c; culis, 3c less; salted, 60 lbs and over, 5c; 50 to 60 lbs, 4@4 1/2c; 40 and 50, 4c; kip and veal skins, 10 to 30 lbs, 4c; calf-skin, sound, 3 to 10 lbs, 6c; green, unsalted, 1c less; culis, 1-2c less; sheepskins, shearlings, 10@15c; short wool, 20@30c; medium, 30@40c; long wool, 50@70c.

Merchandise Market.

Salmon—Columbia, river No. 1, talls, \$1.25@1.60; No. 2, talls, \$2.25@2.60; fancy No. 1, flats, \$1.75@1.85; Alaska, No. 1, talls, \$1.20@1.30; No. 2, talls, \$1.90@2.25.

Beans—Small white, No. 1, 2c per pound; butter, 3c; bayou, 1 1/2c; Lima, 3 1/2@4c.

Cordage—Manilla rope, 1 1/2-inch, is quoted at 8 1/2c, and Sisal, 6 1/2c per pound.

Sugar—Golden C, 5c; extra C, 5 1/2c; dry granulated, 5 1/2c; cube crushed and powdered, 6 1/2c per pound; 1/2c per pound discount on all grades for prompt cash; half barrels, 5c more than barrels; molasses, 15@16c per pound.

Coffee—Costa Rica, 20@23 1/2c; Rio, 20@22c; Salvador, 19@22c; Mocha, 27@31c; Padang Java, 30c; Palembang Java, 26@28c; Lahat Java, 23@25c; Arabica's Mokaska and Lion, \$30.30 per 100-pound case; Columbia, \$20.30 per 100-pound case.

Rice—Island, \$3.50@4 per sack; Japan, \$3.75@4.

Coal—Steady; domestic, \$5.00@7.50 per ton; foreign, \$5.50@11.00.

Meat Market.

Beef—Gross, top steers, \$3.25; cows, \$2.25@2.50; dressed beef, 4@5 1/2c per pound.

Mutton—Gross, best sheep, wethers, \$3.00; ewes, \$1.50@2.75; dressed mutton, 5c per pound.

Veal—Gross, small, 4 1/2c; large, 3@3 1/2c per pound.

Hogs—Gross, choice, heavy, \$3.00@3.25; light and feeders, \$2.50@2.75; dressed, 3 1/2@4c per pound.

SAN FRANCISCO MARKETS.

Flour—Net cash prices: Family extra, \$3.75@3.85 per barrel; bakers' extra, \$3.55@3.65; superfine, \$2.85@3.00.

Barley—Feed, fair to good, 7 1/2@8c; choice, 7 1/2@8c; brewing, 8@9c.

Wheat—Shipping, No. 1, \$1.07 1/2; choice, \$1.10; milling, \$1.17 1/2@1.22 1/2.

Oats—Milling, 75@82 1/2c; superfine, 90@95; fancy feed, 82 1/2@87 1/2c; good to choice, 75@80c; poor to fair, 67 1/2@72 1/2c; gray, 72 1/2@80c.

Potatoes—Rwets, \$2.50@2.75; Burbanks, Oregon, 75@1.00.

Hops—Quotable at 2@3c per barrel.

HELPFUL FARM HINTS

SUGGESTIONS FOR THE AGRICULTURIST AND STOCKMAN.

How to Combat the Army Worm—Box for Bunching Asparagus—Very Large Horses Not Desirable—Protecting Early Potatoes.

Putting in an Old Enemy.

The army worm is making its appearance in a number of the Central Western States, notably Kansas, Missouri, Illinois and Southern Indiana. While during recent years this insect has done little damage, it is well to understand it. The worm is closely related to the cutworm, and hatches from eggs laid by a handsome brown moth, in eight to ten days. They are at first green, but soon acquire longitudinal stripes of yellow, black, or green. The worms feed on any kind of grasses or grains, and



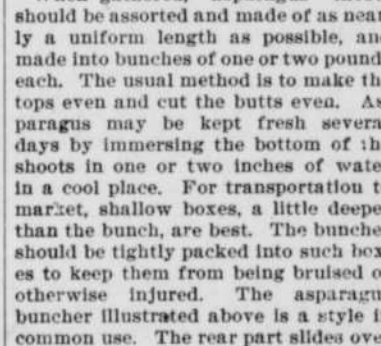
ARMY WORM; a MOTH, b LARVA.

become full grown in about a month after hatching. Unless the worms become very abundant they usually remain unnoticed, but if conditions are favorable armies sometimes appear, moving in solid masses across fields, destroying all vegetation. The full-grown larvae enter the ground, pupate in earthen cells, and emerge in about two weeks as moths. In some latitudes two, and frequently three, broods will develop in a single season. The worms are attacked by a great many enemies, such as birds, parasitic insects and infectious diseases. Their natural enemies usually hold them in check, so that there is little extended injury to crops. If, however, the worms are very numerous, the migration from one field to another may be prevented by constructing barriers, as in the case of chinch bugs. Deep furrows with perpendicular sides, boards set on edge with the upper edge smeared with tar, plowing under infested crops and rolling, have all proved efficacious in certain instances, and can all be tried with profit. Much was expected of the various fungous diseases which have not proved entirely satisfactory. Spraying infested crops with London purple or Paris green has been tried with good results, but other methods should probably be resorted to first.

Marketing Asparagus.

When gathered, asparagus shoots should be assorted and made of as nearly a uniform length as possible, and made into bunches of one or two pounds each. The usual method is to make the tops even and cut the butts even. Asparagus may be kept fresh several days by immersing the bottom of the shoots in one or two inches of water in a cool place. For transportation to market, shallow boxes, a little deeper than the bunch, are best. The bunches should be tightly packed into such boxes to keep them from being bruised or otherwise injured. The asparagus buncher illustrated above is a style in common use. The rear part slides over

Asparagus Buncher.



ASPARAGUS BUNCHER.

The four light crosspieces and is made of hard wood. It can thus be easily regulated to suit any length of asparagus stalks. Lay raft or twine across the buncher and place the tip of the stalks against the end board. When the buncher is filled, the asparagus is easily tied.

Size of Farm Horses.

The large, overgrown horse is not always the strongest or best fitted even for work on the farm. There is always a considerable amount of roading to do, and if the roads are hard, and especially if they are stony, the heavy horse is very liable to go lame after being driven. His feet are not so tough as those of smaller and better built horses, and this, besides his heavier weight, puts the large horse at a disadvantage on the road. There are also on the farm many kinds of work that require agility, quickness and endurance in horses rather than great strength. For all-around farm work there never was a better breed of horses than the old Morgans. Many farmers have learned this, and the horse that shows the Morgan characteristics, of moderate size, with compact, well-knit frame, will be preferred by them to the excessively large horses that attract most attention when exhibited at agricultural fairs.

Live and Dead Weight of Fat Lambs.

Many farmers do not know how to estimate the waste in butchering of different kinds of stock. It is larger in the lamb than in most other stock, and in our experience many years ago we found that it was a very fat lamb that would give half his weight in salable

meat. An English farmer in Farming World of Edinburgh reports some, which were probably extra fat, in which the live weight varied from 63 to 78 pounds, and the weight of meat was from 48.05 per cent. to 53.84 per cent. Only two were below 50 per cent. The butcher paid double price for the dead weight over what he was offered the lambs for alive, and lost by the bargain.

Varieties in Timothy.

The West Virginia Experiment Station is testing specimens of timothy grass that ripen at different times and otherwise show such peculiarities that it is hoped to make new varieties of them. We have not much faith that this can be done. Years ago we have seen timothy that was very late in ripening, but it was always accounted for by the fact that it grew on low, wet ground, where it did not start to growing until very late. The heads of this late timothy were extremely long, some of them a foot or more in length, but the seed from these heads sown on warm upland produce timothy of the usual type, and which ripened at the usual time. The growth of timothy has always varied very much with the kind of soil it occupied, but the grass has its fixed characteristics that are common to all.

Thinning Fruit.

In most sections this year the apple set of fruit is very heavy. Pears, peaches and other fruit in the Northern States will not need to be thinned, as the crop is light. There is danger, if the full set of apples is left on where the tree has blossomed very fully, that the tree may be enfeebled and thus fall a more ready prey to the blight. The loss of vigor caused by bearing is very obvious to the experienced eye of an orchardist as he sees the trees at a distance. The non-bearing trees will have a dark green foliage, while the bearing trees will show a paler green color, indicating the strain that bearing is on the trees.—American Cultivator.

Protecting Early Potatoes.

Early potatoes in the garden may be protected against potato bugs and fleabeetles by a board at each side of the row covered with netting, as shown in this sketch. This will also conserve moisture, and if the soil is rich will make the crop earlier. Of course it is



TO PROTECT POTATOES.

not practicable on a large scale, but applies to small gardens where poisons are not used.

Phosphate in Dry Seasons.

It is never advisable to sow phosphate with grains put in during a drought. If the seed comes in contact with the fertilizer it is very apt to be injured rather than benefited. If the fertilizer is broadcasted it has a drying effect on the soil, owing to the sulphuric acid which it contains. Often after wheat has been drilled with phosphate the tubes which the phosphate had choked will at first show the best wheat. But after heavy rains come to dissolve the phosphate these missed rows will lose their advantage while those phosphated will rapidly improve.

Orchard Grass with Clover.

Orchard grass goes with clover much better than timothy, though most farmers have got in the habit of seeding timothy and clover together. The orchard grass will not make a perfect sod if sown alone, as its habit is to grow in bunches and spread after the first year. When sown with clover the latter as it dies out leaves not only room but plant food, which the orchard grass avails itself of. Orchard grass and clover are both ready to cut together, and if cut early, as both should be, two and even three crops may be grown on rich land in a season.

Agricultural Notes.

The advice is to sow crimson clover in the fall as early as is practicable.

The absolute necessity of facing drouths and dry spells is evident. We can no longer speak of irrigation as a Western topic.

A Texas farmer is said to have the largest mule that ever walked on American soil. It is eighteen and one-half hands or six feet two inches in height, and weighs 1,600 pounds.

In the Eastern States, with spraying, both Fameuse and Talman sweet apples do well, and are fairly profitable. Unless put in cold storage, however, the Fameuse disappears in December.

In a bulletin of the Vermont station, it is stated that tuberculin is capable of producing tuberculosis in healthy cattle. This agrees with the results of the researches of Professor Virchow on the same subject.

It is cheaper and better to get the straggling stumps and stones out of the fields than to attempt to work around them with the reaper, mower, cultivator or harrow. Many valuable implements are annually injured from stumps or stones.

Farmers should cease to use young and immature stock for breeding purposes. It may happen that selected young animals will give good results, but the continued use of such is sure to prove disastrous in the end. Experiments made with full-grown adults and immature ones have demonstrated that the adults produce harder offspring than the young parents.

The small Henderson dwarf Lima bean, which has been a favorite, is being superseded by other dwarf kinds of larger size, which are now fully equal to the pole varieties, and can be produced with less expense and labor. Those who have used the dwarf kinds find that less land is required and the cultivation given is more easily performed than by the old method.