

SHELTER BELTS AND EVERGREEN BARN.

As we approach this subject, let us put several important facts together: First, the last terrible winter of '99 has brought sore disappointment to many a fruit-grower, especially to those engaged in raising peaches; and this industry must be put upon a new basis.

Second, in '87, Prof. T. Russell, of the signal service, found, that when the temperature of the air was 84°, with a relative humidity of 50°, evaporation, with the wind blowing five miles an hour, was 2.2 per cent greater than in a calm. At thirty miles an hour evaporation was more than six times as much as when there was no wind. And we all know how our hot south winds fairly devour the moisture.

Third, a gentleman of our state, who for years kept the weather register for the government, found that, if he took the thermometer from the open and put it in a thick grove of red cedars, the mercury rose four degrees. He also found that on a cloudy day, with the mercury below zero, if he took the thermometer from a sheltered place and put it in the full sweep of a northwest wind, the mercury would drop three degrees. Another experiment was to take the mercury from two feet from the south side of a barn, and put it the same distance from a close-sheared cedar hedge, and it would rise two degrees.

Here then we have the dangers which menace us. The hot winds of summer and the cold winds of winter, which drink up the moisture, so that the roots of our trees are frozen dry, and thus their vigor is exhausted.

To offset the dangers we must produce a calm, and shut out the fierce and destructive cold.

W. B. Reynolds, of Arcadia, Neb., has an artificial fish and irrigation pond, fed by a powerful wind mill. I stood by the side of it with the owner when a strong gale was blowing, and there was not even a ripple on the water. There was perhaps a half acre in the pond. He said at first he had been much troubled by the water washing the banks, so he planted them thick with willows, which completely checked the winds. But now another difficulty arose. He wished to get ice from the pond, but it would not freeze with the belt of trees around it, and he must cut them down.

Here is an important fact—the power of the wind break. I saw peach trees, this spring, sound to the tips, that were in full bloom after 35° below zero, because well sheltered. What should we use for the shelter belt? Red cedar and ponderosa pine. We have seen that evergreens were a silent furnace, giving off heat in winter, and they are a perpetual windbreak in winter as well as in summer.

Careful experiments made recently in Germany, show that the average de-

ciduous tree throws off ten times as much moisture as an evergreen, and we have seen the cedar and pine flourish where a cottonwood or ash could not possibly live. So the evergreen must be used because it can live on so little water, and also because it will not drink up so much moisture that belongs to other trees. The Platte cedar will endure any climatic change, and for ages has borne the extremes of drouth and flood, hot winds in summer, and winter blizzards. Properly grown it will transplant as easily as an elm or box-elder, and will grow nearly as rapidly. You can get good 2-year old, 10-inch seedlings for \$1 per hundred, let them grow a year in nursery row, when they will be 18 to 24 inches, well rooted and branched, and all ready to plant out. For a ten acre lot I would put out two rows, eight feet apart, put the trees eight feet distant in the row, and break joints. One row of cedar and one of ponderosa would make a fine shelter belt.

Evergreen Barns.

In our dry climate, we have but a few wet storms. Many successful farmers take their cattle through the winter with no shelter but a wire fence. There must be loss in this method, however. Excellent protection can be made with three rows of Platte cedars, planted as above, and through the lot plant cedars, say a rod apart. As the trees get size, trim off the lower limbs, save on the two outside rows, so the cattle can go under them. Cultivate well for five years, and you can turn in your cattle. In short, you have an evergreen barn, nearly as good as if made of lumber, healthy and thrifty, and getting better all the time.

In Illinois where the winters are often wet and the storms are bad, I have seen these shelters of Norway spruce. These trees are worthless in Nebraska, but we have others to take their place. Cattle should not be allowed in the shelter yard in summer. The manure should be hauled out, and the land plowed. It has been thought that manure would kill evergreens. Well, it will kill any kind of a barn in short order if it is not cleaned out. But I have noticed in the East, in public parks and private grounds, there is an immense amount of stable manure put around the choicest Rocky Mountain evergreens, to make them thrifty and to heighten their silvery colors.

An evergreen barn can be made exceedingly beautiful. The outside row can be of silver cedar from the Rockies, which is as hardy as the Platte cedar. Outside of this, if you wish, you can put a row of Picea Pungens, or silver spruce, which is the most beautiful tree on earth.

As to the Cost.

If you use only Platte cedar you can, as I said before, get the seedlings for a

cent apiece. If you want larger transplanted trees, you can get them \$5 to \$10 per hundred. The Pungens will cost you, 18-inch trees, \$15 to \$25 per hundred, but think of the beauty of them! If you are not an expert in handling evergreens, you can get good trees in variety, planted and cared for two years for 25 cents per tree. One hundred dollars will make a fine evergreen barn, which will be of great use as well as an ornament.

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HIGH ON HOOF.

The sale of Simpson Fennel's cattle at his home in Fremont county, Iowa, about fifteen miles southeast from Nebraska City, at six cents a pound on foot, shows that good meat is in demand by British buyers. A shipper purchased the Fennel herd of beeves and sent them directly to England after paying Fennel ninety odd thousand on-a-gold-basis dollars for them. Had the money fallacies of Bryanarchy prevailed in 1896 would Fennel's cattle have been measured by gold or silver? Is the Scripture true: "By whatsoever measure ye mete it out; it shall be measured to you again?"

POLITICAL.

"To begin a war to secure self-government to one Spanish colony and to refuse it to another equally desirous, and according to Admiral Dewey more capable of it, exhibits inconsistency that is not easy to explain," says the Portland, (Me) Press (rep.) in its comments on the president's Pittsburg speech.

"One thing that President McKinley persistently omits to explain in speaking of the Philippine campaign is the censorship, says the Philadelphia Ledger (rep.). "It seems to be doing more harm to the American cause than to that of the insurgents, and the American people are becoming thoroughly dissatisfied with it. As it appears to serve no good purpose, why is it not abolished?"

"Our word goes to the representatives of the republican party throughout the Union to stand by its primordial principles and refuse to accept greed as its motive, though it may be wrapped in the flag and consecrated by the spume of pseudo-patriots," counsels the San Francisco Call (rep.). "The rights of man, government by consent of the governed, the equality of all before the law, were the high legend written upon the battle-standard of Lincoln republicanism. Let that legend shine out like the stars, and the nation will turn to it, away from all the counterfeit enthusiasm and forged pretence of the crowd of grub-hunters and small tinkers, who have no use for the party unless it can stuff their bellies or their purses."