

Harness Polish.

The "Science News" gives the following receipt for making a harness polish: Four ounces glue, a pint and a half of vinegar, two ounces gum-arabic, a half-pint black ink, two drachms isinglass. Break the glue in pieces, put in a basin, and pour over it about a pint of the vinegar; let it stand until it becomes perfectly soft. Put the gum in another vessel, with the ink, until it is perfectly dissolved; melt the isinglass in as much water as will cover it, which may be easily done by placing the cup containing it near the fire about an hour before you want to use it. To mix them, pour the remaining vinegar with the softened glue into a sand-pan upon a gentle fire, stirring it until it is perfectly dissolved, that it may not burn the bottom, being careful not to let it reach the boiling-point; about 82° C. is the best heat. Next add the gum; let it arrive at about the same heat again; add the isinglass. Take from the fire, and pour it off for use.

To use it, put as much as is required in a saucer, heat it sufficiently to make it fluid, and apply a thin coat with a piece of dry sponge. If the article is dried quickly, either in the sun or by fire, it will have the better polish.

Dr. Harvey Reed, of Mansfield, Ohio, says the Popular Science Monthly, after a study of forestry as affecting his own State, concludes that amongst the results of the destruction of the forest and the drainage of the land, are: More wind, more humidity, more rainfall, more dust, more sudden dashes of rain, more sudden changes from one extreme to the other of temperature and moisture, more rapid transmission of water from the periphery to the great basins, robbery of the natural regulators of distribution, and diminution of the common supply of springs and wells. These changes have been followed by a decrease of all forms of malarial diseases and an increase of typhoid fever, catarrh, deafness and chronic pulmonary troubles, and an increase in wind and dust favors the spread of zymotic and contagious diseases.

Mr. A. A. Crozier, of the University of Michigan, has published a thesis on plants. In it he sums up concerning the matter as follows: "It seems to be established that as plants move from the locality of their largest development toward their northern limit of growth, they become dwarfed in habit, are rendered more fruitful, and all parts become more highly colored. Their comparative leaf surface is often increased, their form modified, and their composition changed. Their period of growth is also shortened and they are enabled to develop in all respects at a lower temperature."

The late Arthur Bryant, of Princeton, Ill., had on his lawn a *Catalpa speciosa*, which stood more than forty years uninjured by the severe winters, and made a growth of more than three feet in diameter, says a cor. of the Country Gentleman. I have had both *Catalpas* at my place at Muscatine for over thirty years, and have never seen one of the *speciosa* injured after it became three or four years old, with the mercury sometimes 30° to 36° below zero; but the *bignonioides* often winter-killed, making it unfit to plant for any practical use.

Special Contributors.

A Chatty Letter from the States.

FROM OUR CHICAGO CORRESPONDENT.

The general nineteenth century air of hurry and bustle has so permeated all leading branches of industry that stockmen are not now satisfied with knowing the state of current events; they want to know what is going to be the situation next month, next year, etc. At present the western stockmen are considerably exercised to know what is in store for them in the cattle trade during the present winter. The outlook just at present many of them do not seem to regard as being very encouraging.

The month of December never brought to market so many good ripe cattle as this winter, and not a few stockmen have been thinking that the country is full of both cattle and corn, and that it is hopeless to anticipate anything better toward spring. But this does not naturally follow, since the chief cause of the very good quality of the beef cattle marketed this winter lies in the fact that the weather has been unusually good for our door feeding, rather than to the fact that the number of cattle in the country is large.

Thus far the glut in the market has not been of ripe cattle, but of unfinished stock, and good judges think that while the present winter will bring forward a large number of good fat cattle, the offerings of mature beeves will not be in excess of the demand.

There was some talk lately about the advisability of changing the time of holding the Fat Stock Shows from November to December, chiefly that the cattle might be in better season for the holiday markets, and also that the carcasses might not be in danger of spoiling as some did in November, on account of warm weather. This idea is not good, because at all the previous shows held in Chicago the weather was too cold in November, and the prices obtained in November for the show cattle were higher than those obtained in December for Christmas cattle.

The number of men who contribute to the supplies of holiday stock now is growing surprisingly large, and the business can by no means be said to be a monopoly.

The number of hogs sent from Chicago to Canada is much larger than generally supposed, and as a Canadian writer not long since said, is fully equal to the number of Canadian sheep and lambs that are sent to the States to find a market.

The growth of the sheep trade in the west is quite large, though for some time sheep raisers have been discouraged by the low prices they have received. The depression of the wool trade and the evident hopelessness of keeping a high tariff on importations, have caused wool-growers to feel very discouraged.

But the mutton demand is increasing, and good fat sheep and lambs have lately been selling relatively better than other kinds of stock. Chicago has made a very rapid growth as a sheep market, chiefly owing to the large development of the refrigerator business.

The bogus butter war continues. The natural butter men are very much troubled at the growth of the bull butter business. The artificial butter men seek to enlist the sympathy of beef cattle growers, by claiming that

the manufacture of oleo. oil increases the value of tallow fat very materially. But a western stockman calls attention to the fact that while the manufacture of bogus butter was never so large as it is now, the prices for fat cattle have seldom been lower than at present. Very likely the demand for animal fat increases the profits of slaughterers, as they can sell for oleo, oil what they formerly had to sell as tallow, but the producer has as yet received no benefit.

While the fight between the cow and bull butter men waxes warm, the manufacture and consumption of bogus butter increases at an astonishingly rapid rate.

Depression in England—Politics and Agriculture—Colonial Exhibition—Fall Shows—Foreign Trade—Herds and Herd Books.

[FROM OUR LIVERPOOL CORRESPONDENT.]

The depression in nearly every branch of trade in England continues. Thousands of would-be industrious men are unemployed, and thousands more are only partially employed. In the great shipbuilding districts the dire distress prevails, and the efforts of the charitable to relieve the sufferings of their fellow countrymen are strained to a degree. Of dock porters and laborers in Liverpool alone over six thousand are out of work. The situation is aggravated by the effect of the French bounties on shipping, and the *Surtaxe de Entrepot*, which are causing cotton to be shipped from New Orleans direct to the continent, instead of being transhipped at Liverpool, as was formerly the case.

The reports from the agricultural districts are equally gloomy. Poverty stalks through hundreds of villages. Men who were formerly in good circumstances are endeavouring to keep up a hollow show, that they may appear as well off as they were formerly. They are engaged in the struggle between a proud mind and an empty purse, and are longing for a return of the good times, which seem to be as far off as ever they were. The poor are steeped in the most miserable poverty. In Lincolnshire men's wages have been reduced to two shillings per day, and it is only found practicable to give three days work a week, even at this price. Many farms in Warwickshire are unoccupied, and the laborers have to look to the landlords, who give an occasional odd job. The workhouses are full to overflowing, and were it not that the workmen's wives manage to earn a little in such work as washing and sewing, etc., the wolf would enter many a poor man's door. All of these things look gloomy in the extreme, and men of wide experience declare that circumstances point to some form of moderate protection, otherwise the cultivation of the land will cease, when, as one determined farmer exclaimed the other day, "Britain will be shaken to its foundation."

There is no improvement in the meat trade, but the means of transmitting mutton from the Argentine Republic are now being perfected, and, if reports are true, mutton can be landed, from River Plate and other South American countries, in England, at nearly one penny per pound cheaper than the New Zealand and Australian people can afford to ship it at.

The promise attributed to Mr. Joseph Chamberlain, of "three acres and a cow," has won