### Fruit, Forest and Ornamental Trees on the Manitoba Experimental Farm.

BY S. A. BEDFORD, DIRECTOR EXPERIMENTAL FARM, BRANDON.

In the spring of 1889, three hundred and eighty apple trees were procured from various sources and planted on the farm, one-half in an exposed plot in the centre of the valley, and the balance in a plot sheltered by scrub, on the hillside overlooking the valley.

These trees consisted of ninety-three of the hardiest varieties in general cultivation in the most northern latitudes of the United States and in Eastern Canada, and of some of the hardy varieties recently introduced from Northern Russia.

Many of the hardiest Russian varieties are being grown as low bushy trees, and these are by far the most promising; in the sheltered plot, they are all living and making good growth, having a very healthy, thrifty appearance; but in the exposed plot, several of them were winter killed, and those still living appear to have suffered severely.

Of the tall standard trees, seventy were winter killed, and many of those surviving were injured from sunscald, etc. The following are some of the most promising varieties: -Anisim, Antonovka, Blushed Colville, Krimskoe, Liebig, Plekanoff, Repolovka, Red Repka, Silken, Vargulek, Vargul, Ukrain, Tusoff's Winter, Red Anis, Bielborodovka, Borovinka, Gipsy Girl, Golden White, Hibernal, Kalvil Krasni, Pointed Pipka, Romenskoe and Wealthy.

# CRAB APPLES.

Twenty-five trees were planted in the spring of 1889, consisting of eight varieties; sixteen of these are still living and have made good growth. The following varieties appear to be the most promising: - Transcendant, Hyslop, Whitney's No. 20, Orange, Early Strawberry and Queen's Choice.

Eleven varieties of pears were planted in 1889, most of which were injured by the winter-either killed outright or to the snowline; but a few trees of the hardy Russian varieties escaped with very little injury, and have made fair growth during the past summer; these were the Bessemianka, Gakovka and Gliva Kurskaya.

# PLUMS.

Fourteen varieties of these were planted, but nearly all were injured by the warm winds prevalent during the summer of 1889, and con. sequently were not in good shape to withstand the winter; only a few, however, were killed outright. The following are the most promising :- De Soto, Early Red, Late Red, Nicholas and Otsckakoff.

# CHERRIES.

Only four varieties were sown in 1889, and of these but one (a Russian variety) is still living. A further supply of hardy Russian varieties were procured and planted in 1890, and it is hoped some of these will prove hardy.

# SMALL FRUITS.

Of Gooseberries five varieties were planted on the farm, and have made good growth. The Houghton Seedling came through the winter uninjured. The next best were the Smith's Inc. proved and Downing; but both of these varieties were slightly injured, the previous year's growth being frozen back.

#### CURRANTS.

Nine varieties of currants were grown; all survived the winter and are making good growth. Although very young, some of the bushes were loaded with fruit during the past season. The varieties grown appear to rank in merit as follows: -Black Currants-Lee's Prolific, Black Champion, Black Naples. Red Currants-Fay's Prolific, Ruby Castle, Victoria, Red Cherry and White Grape.

#### RASPBERRIES.

A number of varieties of Raspberries and Blackberries have been tested on the farm, of which the following are the most promising:-Turner and Philadelphia, red varieties, and the Hilborn, a black cap.

### STRAWBERRIES.

Several varieties of Strawberries were planted, some in the valley, and some on cleared shrub land on hillside. All of those planted on the open prairie were killed, but those planted on shrub land were more successful. One of the varieties, the Crescent Seedling, produced an abundant crop of fine large berries during the past season; two other varieties, the Wilson and Captain Jack, also produced some fruit. The most promising varieties are the Crescent Seedling, Wilson, Captain Jack and Manchester. Some other varieties were tried but so far have not been very successful.

# FOREST TREES.

It will be remembered that the summer of 1889 was dry and very trying for newly planted trees and seedlings, leaving them in bad shape to withstand the hard winter which followed. Yet, in spite of such adverse seasons, many of the trees and shrubs came through in good condition, while others which were badly frozen back have since made good, thrifty growth, and appear to be in better shape to go through the present winter. The Acacia or Honey Locust, Beech, Catalpa, Kentucky Coffee Trees, Rock Elm, Sycamore and Black Walnut were all killed out, and the following trees, although still living, suffered more or less injury, and at present cannot be considered as very promising: - White and Black Ash, Black Cherry, Oak, Norway Maple, Arbor Vitæ or Cedar, Hemlock, Austrian Pine and Norway Spruce. The most hardy were the following:-

Green Ash (Fraxinus viridis), the native variety, American Mountain Ash (Pyrus Americana), very promising, European Mountain Ash (Pyrus acuparia), American Alder, European Alder (Alnus glutinosa), Yellow Birch (Betula lutea), White Birch (Betula alba), Canoe Birch (Betula papyracea), Sweet Birch (Betula lenta). The Birch are all very hardy and should be planted liberally. White Elm (Ulmus Americana), from native seed, Ashleaf Maple or Box Elder (Negundo aceroides), the native variety, Soft Maple (Acera dasycarpum), Cottonwoods, Russian Poplars (Populus Beno), (Populus Pyrimidalis), (Populus Petrovsky), (Populus bercolensis), (Populus Wobstii Riga). The Russian Poplars appear to be very fast-growing, hardy trees; they have large leaves of a dark green glossy hue. Populus alba argentea and Populus Bolliana are white-leaved varieties. Russian Willows (Salix voronesh), Laurel Willows (Salix laurifolia), an ornamental variety, Sharpleaf (Salix acutifolia). These Willows are all suitable for windbreaks. Wisconsin Weeping Willow, a very fast-growing variety, Basket Willow, Norway Willow, White

Willow (Salix alba), Yellow Willow (Salix lutea), White Spruce (abies alba), the native variety. SHRUBS AND ORNAMENTAL TREES.

Forty-one varieties were planted, of these the Robinias, Wiegelias, Coluteas, Hydrangeas, Deutizias, Privet and some varieties of Cytisus and Spiras were entirely killed out. The following varieties proved hardy, and some of them are very promising :- Cutleaf Weeping Birch (Betula alba laciniata), very hardy and ornamental; Asiatic Maple (Acer Ginnala), Caragana or Siberian Pea (Caragana arborescens), Lime tree (Tilia Sylvestris), Dogwood (Cornus Sibirica), Flowering Currants (Ribes sanguineum and aureum), Lilac (Syringa vulgaris), Lilac (Syringa alba), Spiraea billardi, Spiraea Nobleana, Spiraea Douglasii, Spiraea opulifolia, Southernwood (Artemisia ambrotanum), Cytisus capitatus), Berberry (Berberis vulgaris), Laurel Willow. These last four varieties are suitable for hedge plants.

### CLIMBERS.

Several varieties of climbing plants were tried, but only two of them survived the winter. These were the Lycium Europeum, known as the tea vine or as Washington's bower, very hardy and a rapid grower; and the Clematis flammula. These were wintered without any protection. Only one variety of Roses was planted in 1889, the Rosa Rugosa. This, however, wintered without any protection, and bloomed during the past summer. This is described as a hardy Russian rose of great beauty, producing fragrant flowers of large size and purplish scarlet

# Blue Greys.

To the Editor of the FARMER'S ADVOCATE.

SIR,-In looking over the January number of your journal, I see an article on Galleway Cattle from the pen of Mr. James Walker, Winnipeg. Mr. Walker, after stating a few of their good qualities, goes on to say that when crossed with the Shorthorn they throw what is called in Scotland the Blue Grevs, because of their color. Any one who has ever visited Smithfield Christmas Fat Stock Show has often seen the Blue Greys carry off some of the principal honors. Now, I don't remember ever seeing or hearing of a Blue Grey Galloway cross carrying off any of the principal honors. It is true that Blue Greys have carried off some of the champion honors at Smithfield, London. I think eleven years ago a Blue Grey cross steer, got by a Shorthorn bull and out of a Polled-Angus cow, carried off the blue ribbon at Smithfield. In 1882 a Blue Grey heifer was champion cross-bred animal, she also was a cross between the Shorthorn and Polled-Angus breeds. Some four years ago O. C. Wallis, of Bradley Hall, Northumberland, showed a very fine Blue Grey steer; he was a Shorthorn and Polled-Angus cross. I don't say but that the Galloway may make as good a cross with the Shorthorn as the Polled-Angus, as I don't remember ever seeing a direct cross between them, and I have never seen or heard of the Galloways or their grades or crosses doing much in the fat stock show rings either at Smithfield or Chicago, and I think most of the Blue Greys we have often admired at the English fat stock shows, nine of every ten were crosses between the Shorthorns and Polled-Angus. Honor to whom honor is due.

LESLIE SMITH.

Wawanesa, Feb. 16th, 1891.