

The Blue Jay.

A noted dandy is the jay,
With mitred crown and plumage gay.
Consider him and all his kin!
They reap; but neither toil nor spin;
Yet Solomon, in all his glory,—
Of whom we read in ancient story,—
Was not arrayed like one of these
Now pirating among the trees.

Our crested jay, with all his beauty,
Has neither sense of right nor duty,
A wary and a cunning thief—
His wickedness exceeds belief.
He looks where cosy nests are swung,
He steals their eggs, destroys their young,
And gobbles them like worms and millers,
As if they were but caterpillars!

But let us hear his merits, too,
And give the devil and him their due;
His wit is pure intelligence,
His cunning equals human sense;
He knows the power of dynamite;
He knows the gunner, too, at sight;
And marks the distance he should flee,
As if by trigonometry.

His insect food is rare and various—
Procreas, harpalus, carbonarius,
Anisopterix pomataria,
Paugi, zerene catenaria,
Acheta, full-grown noctuida,
Halesidota, tortricida,
He nicely traps while keeping sentry;
He knows them all as well as gentry.

With ready zeal he joins the cat,
When from the barn she drives the rat;
Then screams aloud, goes into fits;
And scares the cat out of her wits;
Drives frightened puss outside the door,
And takes possession of the floor.
Wherever he assumes his station,
He's master of the situation.

—Wilson FLAGG, in *Boston Transcript*.

The Winter-Killing of Wheat.

[Correspondence Country Gentleman.]

The report from all sections is that the wheat was more or less Winter-killed, and though the winter was an open one, with no very extreme weather, there must be some reason for it, aside from the cold. Wheat may be classed among our most hardy and vigorous plants, and will stand an untold amount of simple freezing and thawing, providing its seed-bed remains firm, and yet, wheat with its feet well planted, has been killed the past winter in great quantities; so some other cause than freezing out will have to be assigned. The result of considerable examination of wheat fields this Spring, and consultations with our best wheat growers, leads me to the conclusion that wheat is quite as often killed by poisoning as by frost, and that wheat "rotting on the ground" is only the last step in this stage of poisoning, a result I find, since this article was written, also reached by the *Country Gentleman's* correspondent, W. J. F.

The more valuable the wheat land the most humus, or vegetable matter, will be found in it. Not the crude vegetable matter of our peat swamps, charged with humic acid, but the matter artificially applied in the form of manure and clover along with the natural soil. The value of this is in its state of decay, caused by the oxygen of the air, aided by the cultivation, and if certain conditions are met, this land will bear the finest of wheat, but that it also often kills either the whole or part of the wheat, may be seen from the following: If water remains for a long time in this soil, in a state of inactivity—not passing out to give place to a fresh supply—the stagnation that ensues will form humic acid, as truly

as in the peat swamp, though in a less generous way, and in an open winter wheat will grow if the conditions are at all favorable, and this acid is either taken up with the other elements the plant absorbs, or else the acid acting upon the exterior of the plant roots so affects them that they fail, either in properly absorbing the fertility or extremity of the roots. The plant is starved from the destruction of the sphopoles, and is then described as having "rotted in the ground."

My observation has been that wheat will stand a great deal of running water, if it is in the form of an overflow, and the drains immediately after the inundation clear the ground of standing water. It is not this wheat that is affected, but the wheat on lands that holds the surplus water until it is removed either by the slow process of percolation, or else by evaporation. Almost any wheat field will show places where the water has been in surplus quantities; yet it is in these very "hollows" where the humus will be found in greatest abundance, while on some clay knoll, not one-fourth as fertile, there will be a fine stand of wheat, the reason being that the one had drainage, if only by filtration of the soil, and the other spot held its surplus moisture until the acid formed and killed the wheat plants.

In winters when the ground is frozen continuously from December until April, the thawing out is followed so closely by copious rains and warm weather that the soil is soon put into its normal condition, and little chance is offered for the development of poison. The lesson of all others the past winter is ample drainage, so that the water can be removed from the soil before stagnation can develop its poison. It is also to be supposed that bone meal owes much of its value as a stimulant (or fertilizer) on wheat to its power to neutralize the acids, should they form even in a slight degree, and by its stores of plant-food assist in fostering the roots of the wheat by an almost forced growth.

Weatherly Speaking.

The remarkable weather we have been lately experiencing has caused scientific gentlemen, meteorologists, and the professional weather prophets, to devote more than ordinary study to the subject. Vennor and Tice and one or two other vaticinators of lesser fame have predicted a cool and moist Summer consequent upon the cool and moist Spring, but our own St. Louis Academy of Science may be said to take some issue with the gentlemen alluded to. At the last meeting of the Academy, Dr. Engelmann read a paper on the weather, basing his views on past experience. He said that it had been agreed by meteorologists and others, that May, 1882, was about the coldest May in the knowledge of man. The mean temperature was considerably colder than the normal; for while it was as high in 1880 as 71.3° and 71.4° in 1881, in 1882 it was only 60.7°. Only twice had he found it as low—in 1838 and in 1867, when the temperature was 60.5°. In both the years mentioned, a hot Summer followed the cold May. Of course, he said, it cannot be predicted upon the precedents that the coming Summer will be hot. It will be worth while, however, to keep watch of the season, and compare predictions, precedents, and actual facts. The farmer is interested in the matter and will, no doubt, take occasion to keep a sharp eye upon the changes and elemental disturbances. As a pendant to the matter above, it may be said that the Summers of 1838 and 1867 were very unhealthy and epidemics were prevalent.—*St. Louis, 17th June.*

Measurements of the Great Lakes.

The following measurements of the great lakes will be found interesting and are absolutely correct, having been taken by Government surveyors.

The greatest length of Lake Superior is 335 miles; its greatest breadth is 160 miles; mean depth, 688 feet; elevation, 627 feet; area, 82,000 square miles.

The greatest length of Lake Michigan is 300 miles; its greatest breadth, 103; mean depth, 690 feet; elevation, 506 feet; area, 23,000 square miles.

The greatest length of Lake Huron is 300 miles; its greatest breadth is 60 miles; mean depth, 600 feet; elevation, 274 feet; area, 20,000 square miles.

The greatest length of Lake Erie is 250 miles; its greatest breadth is 80 miles; its mean depth is 84 feet; elevation, 261 feet; area, 6,000 square miles.

The greatest length of Lake Ontario is 180 miles; its greatest breadth is 65 miles; its mean depth is 500 feet; elevation, 261 feet; area, 6,000 square miles.

The total of all five is 1,265 miles, covering an area of upwards of 135,000 square miles.—*Chicago Times.*

Railway Gardening.

If our railway companies would employ a forester and gardener or two, they might employ their thousands of acres of waste lands for crops, grass, fruit trees and so on, with profit, so that they could afford to refuse to be any longer in the position of the poor shop-keeper or barber who fills his shops and pastes his walls over with advertisements and placards because he cannot make two ends meet without the small sums obtained by this disfigurement. At present our railway companies allow their stations and bridges to be so hideously pasted and papered over that the property has the appearance of the last stages of struggling poverty. In many parts of Belgium the land has been planted with fruit trees and other things many years, and in Wurtemberg for about twelve years past a forester has had charge of the lands. He pays particular attention to planting the slopes of excavations and embankments to prevent washing and slipping, grows quick fences, and, where practicable, fruit and timber trees. The gardens at the stations are largely devoted to fruit, and so made useful and ornamental at once. A profit of about 14s. an acre has, it is said, been made for the past five years on the ground so utilized.—*London Engineer.*

The June crop report of the Ohio Board of Agriculture, condensed from about one thousand township returns, will give the following prospects. Fruit estimates are based on the full crop of two years ago; all others on the crop of last year: Wheat—Condition 99 per cent., a probable total of 37,320,000 bushels as against 37,580,000 last year. The damage to wheat by the April frosts was 4½ per cent. Rye 106, barley 98, oats 103, timothy meadows 164, clover 85, pasture 97. Potatoes—Acreage 102 per cent. Corn ground is wet and heavy, and planting later than any spring for at least twenty years. Only 82 per cent. reported planted June 1. Apples, prospects 66 per cent., pears 62, peaches 38, grapes 82, berries 87. Fruit and wheat are most injured by frost in the southern half of the state. The latest reports complain of much "cheat" or "chess" among the frosted and flooded wheat. The weather is now more favorable for corn.