

## Agricultural.



### AGRICULTURAL HYMN.

Great God of Eden! 'twas thy hand  
First clad earth in bloom,  
And shed upon the smiling land  
Nature's first rich perfume:  
Fresh at thy glance the flowers sprang,  
Kissed by the sun's first rays—  
While plain, and hill, and valley rang  
With life, and joy, and praise.

God of the Clouds! thy hands can ope  
The fountains of the sky,  
And on the expectant thirsty crop,  
Pour down the rich supply:  
The farmer, when the seed-time's o'er,  
Joys in the mercies given—  
Thinks on thy promised harvest store,  
And, smiling, looks to Heaven.

God of the Sheaf! to thee alone  
Are due our thanks and praise,  
When Harvest's grateful labor's done,  
On Plenty glad we gaze:  
Then shall our thoughts on Heaven rest:  
Thy grace we will adore,  
And thank that God, whose mercies blest  
Our basket and our store.

### WHY ARE MEALY POTATOES MORE NUTRITIOUS THAN THOSE WHICH ARE WAXY?

*From the Canadian Agriculturist.*

Because of the greater quantity of starch which they contain. Thus, a microscope shows a potatoe to be almost entirely composed of cells, which are sometimes filled, and sometimes contain clusters of beautiful oval grains. Now, these little grains remain unchanged in cold water, but when it is heated to about the degree that melts wax, they dissolve in it, and the whole becomes a jelly, and occupies a larger space than it did in the form of grains. When a potatoe is boiled, then each of the cells becomes full of jelly, and if there be not a quantity of starch in the cells, it will not burst. But if the number of grains or their size be very great, the potatoe is broken on all sides by the expansion of the little masses of jelly; and meanness is produced.

Frost-bitten potatoes are sweet, from the spontaneous conversion of their starch into sugar: the same effect takes place when potatoes sprout in the spring, and they are consequently of less value as food. Potatoes should be stored in the fall with a portion of earth adhering to them, or at least mixed with them; this keeps them a little damp, and prevents the action of the atmosphere from causing a too powerful evaporation.

### STARCH FROM THE HORSE CHESNUT.

Mr. Belloe stated to the Academy of Science, of Paris, that he had obtained from 19 to 21 per

cent of perfectly white and tasteless starch from the Horsechestnut, by simple washing in cold water and decantation.

### HOW TO DISTINGUISH MUSHROOMS FROM POISONOUS FUNGI.

The Fungi form an interesting and rather extensive department of the vegetable kingdom; several of the species being highly poisonous, and many fatal mistakes are made from not knowing how to distinguish them.

The fact that a fungus is pleasant in flavour, affords a presumption that it is wholesome; but, if on the contrary, it has an offensive smell, a bitter, astringent, or styptic taste, or is even of unpleasant flavor, it is unfit for food. Color, figure, and texture cannot be relied on; yet the pure yellow, gold color, bluish pale, dark or lustre brown, wine red, or the violet, belong to many that are eatable; while the pale or sulphur yellow, bright or blood red, and the greenish, are generally poisonous. The safe kinds have mostly a compact, brittle texture; the flesh is white; they grow more readily in open places than in damp or wood-shaded spots. In general, those may be suspected which grow in caverns, on animal matter putrifying, as well as those whose flesh is watery.

### EMBELLISHMENT OF ROCHESTER, N. Y.

*From the Canadian Agriculturist.*

The *Horticulturist* observes that an extensive and beautiful improvement is about to be effected in the environs of Rochester, by building up a part of the suburbs of that city, so as to combine the greatest amount of comfort, health and beauty possible. A suitable piece of land has been selected; in the centre of this, a park of 60 acres is to be laid out and planted in the best manner, and around this are to be located the various cottages and villas of the shareholders, with ample space for gardens, shrubbery, &c.

We are glad to hear of this laudable undertaking, and hope the example will not be lost upon other cities in this hemisphere. The almost entire absence of even unadorned open spaces in American towns having large populations, is a serious drawback to health and comfort, and indicates a sad want of taste. We hope the proper authorities will look to these matters, as regards the public buildings and institutions in Toronto; so that our fair city may be rendered still fairer, by the refining and elevating influences of nature, aided by art. Providence has wisely connected the conditions of public health with external adornments. Our beautiful University grounds have yet to be completed; the extensive common, when enclosed and planted, will form a public park unparalleled, perhaps, on this continent; and the ornamental grounds of the cathedral church of St. James, now in course of erection, and the normal school, about being erected, will greatly add to the appearance, and we may observe also, to the salubrity of our rapidly increasing city.

### RYE IN A WILD STATE.

According to M. De Candolle, both history and botany agree in rendering it probable that wheat, barley, rye, and oats came originally from

Asia, especially from the western and central regions of that continent. M. C. Koch, an eminent scientific traveller, affirms that he found Rye under circumstances, in Armenia, the Caucasus and Crimea, where it appears to be really spontaneous and native. On the mountains of Pont, at an elevation of 5,000 or 6,000 feet, he found Rye growing on a granite soil; it was thin and the ear about 1 to 2½ inches long, and no one remembered that it had ever been cultivated in the neighbourhood.

**MAKE YOUR OWN CANDLES.**—Take twelve ounces of alum for every ten pounds of tallow, dissolve it in water before the tallow is put in, and then melt the tallow in the alum water with frequent stirring and it will clarify and harden the tallow, so as to make a most beautiful article, for either summer or winter use, almost as good as sperm.

If the wick be dipped in spirit of turpentine, the candles will reflect a much more brilliant light.—*American Farmer.*

**PASSION FLOWER.**—The *New Haven Herald* gives the following interpretations of this curious and much admired flower, which will not be uninteresting to devotees of Flora:—

"The leaves resemble the spear that pierced our Saviour's side—the tendrils, the cords that bound his hands, or the whips that scourged him—the ten petals, the Apostles—Judas having betrayed and Peter deserted—the pillars in the centre, the cross or tree—the stamens, the hammer, the stylos, the nails—the inner circle around the centre pillar, the crown of thorns—the radiance, the glory, the white, the flower the emblem of purity—and the blue, the type of heaven. On one species, the *pasiflora alta*, even the drops of blood are seen upon the cross or tree. The flower continues three days open, and then disappears, thus denoting the 'resurrection.'"

**IMPORTANT TO TANNERS OF LEATHER.**—Henry W. Ellsworth, Esq., says the *Lafayette Journal*, has shown us several specimens of leather, which were tanned under his own eyes, in the space of ten minutes, by a process of which Marion Hubbard, of Rochester, New York, is the inventor.—This statement may seem almost incredible, when it is considered that six, eight or ten months are required by the ordinary process.

Mr. Ellsworth has in his possession a pair of boots and a pair of shoes made from a raw hide tanned in less than a day and a half, by his new process. The leather is tanned by a compound of chemicals, and in time and materials is a saving of at least five hundred per cent. over the present slow method of making leather.

The right, says the *Journal*, for Connecticut and Massachusetts was sold for \$500,000; Ohio for \$150,000. This undoubtedly is one of the greatest improvements of the age.

**THE SORROWFUL TREE.**—In the Island of Goa, near Bombay, there is a singular vegetable—"the sorrowful tree"—because it only flourishes in the night. At sunset no flowers are to be seen, and yet, half an hour after it is quite full of them.—they yield a sweet smell; but the sun no sooner begins to shine upon them than some of them falls off, and others close up; and thus it continues flowering in the night the whole year.

Grace, in the soul of a believer, is just such a flower. In the dark night of affliction it is fresh and fragrant, puts out its blossom and seems full of immortality; but when the sun of prosperity arises and shines upon it, and is surrounded with earthly comforts, then for the first time its divine life withers; it collapses and shuts up its leaves.