

The first number of the Journal has been addressed to all the Members of the Provincial Legislature, and to several individuals, who have not ordered it; and should they not be disposed to subscribe to it, they are requested to return the first number with the present one to the Secretary, at Montreal. All who continue to receive the Journal, will be considered subscribers for this year.

The Agricultural Journal will give insertion to Advertisements on all matters connected with lands, stock, implements, and products of Agriculture, on the usual terms. As the Journal will, perhaps, have as large a circulation as any newspaper in the Province, it will be a very favourable medium of advertising any and all matters connected with Agriculture. Advertisements to be addressed to the Secretary of the Society, or to the Publishers, on or before the 15th of each month.

A list of the Members of the Lower Canada Agricultural Society shall be given in the next number.

THE IMPORTANCE OF AGRICULTURAL CHEMISTRY.

"It is a matter of surprise that so little is known upon the theory of Agriculture. Its practice is nearly coeval with mankind, while, as yet, it scarcely exists as a science. Ask the most experienced farmer to explain the principles which govern the routine he is clearly in the habit of practising? Ask him to determine the value of any rotation of crops, or their comparative exhausting powers? Ask him what ingredients must be restored to the soil to keep its fertility unimpaired? or the exact manner in which climate influences produce? His answers will be vague and unsatisfactory. But these, and a thousand other questions of a similar nature, are capable of solution by science, and they must be answered before Agriculture can be said to rest upon a satisfactory foundation."

"Independently of the money that must annually be lost in fruitless experiments, the disadvantages attending the want of fixed rules in Agriculture are many. Numbers of men, possessed of capital, are deterred from farming by the proverbial uncertainty of the profits attending it; and many who follow the profession of Agriculture, and have the means, will not freely embark their money in the improvements of their farms,

for want of that knowledge that would enable them to calculate their returns with any degree of certainty."

"*Practical Agriculture consists in the artificial accumulation of certain constituents to be employed either as food for man, or other animals, upon a space of ground incapable of supporting them in its natural state.*—This definition of Agriculture distinguishes English Agriculture from the system pursued in various parts of the world, where the population is small, and the land of little value, and where they take only the natural produce of the soil without any effort to increase it, and in time abandoning it for a new soil as yet undisturbed. This is the system in America and other new countries.—*Pictorial Almanack.*

THE IRON TUNNEL OVER THE CONWAY.—One of these "wonders of the age," the tubular bridge, is so far advanced towards completion, that its erection across the wide channel of the river Conway is expected in the course of the ensuing month. The site of the bridge is on the south side of Telford's "suspension bridge," close to the wall of the Conway Castle bridge (also by Telford). It will be precisely of the same description as the one to be thrown across the Menai Straits, the Conway bridge consisting of two tubes or tunnels (one for the up and the other for the down line of rail), each 400 feet in length, while the quantity of tubing required for the Menai bridge in upwards of 3,000 feet. It is rectangular in form, consisting entirely of sheet iron, one inch in thickness. The inside, through which the trains are to pass, is 24 feet high and 15 feet wide. The outside height is much greater, being about 30 feet. The top is of two thicknesses of metal, in the corrugated shape, forming a series of circular tubes of about three feet in diameter. This form is considered to offer the greatest resistance to compression. The sides are of sheet iron of one thickness; the bottom has a double thickness, three feet apart, connected by intermediate longitudinal ribs, so as to give the necessary stiffness for the carriages to pass over. The whole mass, weighing upwards of 1,000 tons, will be placed on the abutments at once. The place where it is being constructed is on a huge timber platform, in a curve of the Conway, a few hundred yards from the intended site of the bridge. The important process of testing the machine will be carried forth on the spot where it now lies. Immediately the tube is completed, with the aid of a flood tide and pontoons, it will be raised so as to admit of the platform on which it is erected being carried away. The result is looked forward to with much interest. It was inspected last week by Mr. Stephenson, Mr. Ross, Capt. Huish, Mr. King (the secretary of the Chester and Holyhead Company), and many of the Directors of the Company; on that day the Chester and Holyhead line was opened to the extent of 40 miles.—*Shrewsbury Chronicle.*