Allman,* who arrived at the following results:—

1. That the starch granule consists of a series of lamellæ in the form of closed hollow shells, included one within the other, the most internal inclosing a minute cavity, filled with amorphous (?) amylum; that the concentric striæ visible in the granule indicate the surfaces of contact of these lamellæ; and that the so called nucleus of Fritsche corresponds to the central cavity.

2. That while the lamellæ appear to be all identical in chemical constitution, yet the internal differ from the external in consistency or other conditions of integration.

3. That the order of deposition of the lamellæ is centripetal.

4. That while the starch granule is thus a lamellated vesicle, it cannot be included in the category of the true vegetable cell, from which it differs not only in the absence of a proper nucleus, but in presenting no chemical differentiation between membrane and contents.

[*To be continued.*]

*Quarterly Jour. of Microscopical Science, ii., 163.

POULTRY BREEDING.

The improvement of our domestic poultry has become one of the popular movements in these days of agricultural progress, and almost universal in our rural economy. The movement is not confined to that eminently useful individual to whom we are accustomed to look for our eggs and poultry supplies—the farmer's wife, but poultry amateurs have sprung up everywhere. There is scarcely a "London Cit" who does not keep his yard of poultry at his "out-of-town residence." This is highly commendable as well as pleasing and useful. It is not so much for profit that so many amateurs are breeding poultry, as for the interest and pleasure such engagements bring with them. Many breeds of our poultry are very beautiful in form and feather, others are prized for their larger size and stately appearance, others for the very smallest of proportions and beauty, &c., so that all our breeds meet with patronisers, and their continuation and improvement as distinct breeds are kept up. We rejoice at all this. It is a course deserving of praise, and adds wealth and happiness to the country. How pleasant and recreative at even it is for a busy "Cit," or a country town resident, to have a bevy of such handsome and attractive birds to command his attention, and give him health and quiet employment after the close confinement at office, study, shop, or counting-house during the day. To my mind it is beyond comparison preferable to cards, chess, and the many attractive games and amusements of the parlor. It is to these amateurs that I desire to say a word or two on poultry breeding. It is indispensable to success that you breed from pure and good stock of whatever variety of fowl you adopt. If your accommodation for poultry is limited in extent, you should adopt the quiet tribei, such as do well in close confinement, *i. e.* the Cochin China, Bramah Pootra, or Malay kinds. They will almost prosper in a tea chest. If space is plentiful you are independent, and may adopt any variety you like. The Dorkings are most serviceable as a whole, both as layers and setters, and many specimens are very pretty, and for table fowl unsurpassed. They will bear rather close confinement, such as a small yard, and would roost in a hogshead. The Game variety is very handsome, and the quality of flesh exceedingly good, but requires plenty of room for its active habits. The pencilled Hamburgs are the prettiest of our farm-yard poulty, and the most prolific layers, but are small and rather wild in character. The Black Spanish are very fine jet blacks, and lay the largest eggs and many of them. These are very attractive to amateurs. The Black Polands, with their large and handsome top-knots, are just the fowls for gentlemen's lawns, noble and proud of carriage, they always attract notice, and as a breed are of a very useful character. The pretty little Bantams are quite the ladies' birds, perfect models of poultry, and where amusement and recreation are chiefly prized, are the most pleasing of any kind to adopt—the very kind to have—their common habits are so attractive, so fussy, self-important, courageous and presuming, that it is quite laughable to witness. The Game Bantams are the prettiest of their kind, and for beauty, symmetry, and plumage, unequalled. There have been of late some other foreign sorts introduced into the kingdom, but I would advise sticking to our established breeds. The Houdans, a French fowl, is probably the best of the recent introduction. In the management of poultry, considerable attention and close watchfulness is requisite to good success, One cockerel to eight hens is the recognized number to keep for profit: more will entail much and many extras. A hen under first-class management will bring off three broods in a year. Their nests may consist of the simplest contrivance, to be about 15 inches diameter. Their coops, for the hen and young chickens, should have covered tops. Their food as inexpensive as possible, or the profit will be small, *i. e.*, potatoes boiled and mashed, mangolds cut into slices, cabbage, greens, in moderation, corn of any kind sparingly, and plenty of pure water. If in confinement they must have grit and lime. A little straw, upon which grain may be thrown, is very conducive to health in promoting much scratching. In fatting, barley meal is probably the best food, mixed stiffly. If troubled with fleas use flour of brimstone. If medicine is requisite, put charcoal, camphor, or iron in their water. O. F.

—*Gardeners' Chronicle.*

THE SEASON OF 1866 IN HALIFAX.

From Colonel Myers' valuable series of daily observations made throughout the year 1866, and laid before the Institute of Natural Science at last meeting, it appears that the coldest weather was in January, the thermometer standing during the night of the 6th and 7th, at 15° below zero. The mean temperature was 20°, being 2° lower than that of 1865, and 5° below the average of that of the preceding three years,

On the night of the 6th and 7th Feb., the thermometer indicated 7° below zero, on the 8th the harbour was frozen. A rapid thaw commenced on the 11th, and the ice broke up on the 12th. The mean temperature of the month was 25°, being 1° above that of 1865 and of the average of the three preceding years.

The mean temperature of March was 20°, being 5° below that of 1865, but corresponding exactly with the average of three preceding years.

Mean temperature of April 40°, same as 1865, but 2° in excess of the average of three preceding years.

May was characterized by cold backward weather. Mean temp. 47°, being 7° below that of same month previous year, and 10° below the average of the three preceding years.

June—mean temperature 50°, being 2° below that of 1865, but an exact average of the three preceding years.

July, which was remarkable in the United States for the long continuance and intensity of heat, indicated 87° on the 13th as the highest temperature. Mean temp. 61°, being 1° in excess of 1865, and 1° below the average of three preceding years.

August exhibited a mean of 62°, being 1° below 1865, and 2° below the average of the three preceding years.

September—mean temperature 58°—being 1° above last year, and the average of the three preceding.

October was a beautiful month, very favorable to farm work—mean temperature 45°, being 1° above 1865, and 2° below the three years average.

The month of November was generally fine till towards the close, when gales occurred—mean temperature 38°, being 10° below that of 1865, and the three years average.

During December the ordinary winter weather prevailed, with a sharp gale from