

most a total failure. In this state of things, the question, What is to be done to winter the stock? has become one of general and absorbing interest. It is much discussed in the agricultural journals by editors and correspondents. It is unanimously settled that live stock must do without litter, except such as can be provided in the shape of sand, burnt clay, fern, leaves, &c. Every wisp of hay and straw must be husbanded for fodder. To eke out the short allowance, the use of lentils, bran, pollards, inferior wheat, &c., is being recommended, in addition to the usual resort to meal, oil-cake, and the like. Sprinkling small quantities of linsed-oil over layers of chaff, flax-seed boiled into a thin, saltish soup, and poured on chopped straw; also, the purchase and bruising of damaged and inferior grains to mix with cut hay and straw, are among the expedients mentioned. On all hands, it is agreed that special attention must be given to warm housing of stock as a prime consideration in economic feeding. Shelter from wet and cold, at all times important, becomes imperative and indispensable when feed is scarce. Let the farmers of Canada give their best attention to this matter, and endeavor so to manage that breeding and growing animals shall not be so stinted of food as to become reduced in condition. These remarks apply to sheep as well as cattle. Care should be taken lest the produce of wool be lessened both in quantity and quality as the result of hard keep.

Agricultural and Veterinary Instruction.

Our readers will perceive from an advertisement in the present number that familiar courses of instruction in these departments will be resumed in January next. The object of the Board of Agriculture in establishing these courses of lectures, is to afford young men engaged in, or intended for, practical farming, an opportunity of becoming acquainted with the scientific principles of their pursuit. The method of teaching, therefore, has special reference to the wants of young men whose means and opportunities for self-improvement are limited. During a few weeks in the depth of winter, a comparatively leisure time for farmers, a young man may acquire a fund of useful information, and be put in a way of reading and observing by himself. The most effective influence that can be brought to bear on the advancement of our agriculture will be found in the enlightening of the minds of young farmers in particular. Hence all efforts like the present ought to meet with a hearty response. We are glad to know that in the department of scientific agriculture, Professor Buckland is so promptly and ably assisted by several of his colleagues in our Provincial University.

We may further observe, that the Board has arranged an extended course of study for such as wish to prepare themselves for the practice of the veterinary profession, and that Professor Smith has made arrangements accordingly, and will be happy to answer enquiries respecting particulars. After passing a final examination under an appointed Board of Examiners, a diploma will be given, certifying that such students are competent to practice the veterinary art in Canada. Young men from the country can enter the class without being subjected to examination either before or at the close of the course. But we understand that prizes in books will be awarded to such students as present themselves for examination at the termination of the course, according to the degree of proficiency they may have attained.

Brighton and Cramahé Farmers' Club.

We are glad to learn that on the 25th of October last, a number of the farmers resident in the townships of Brighton and Cramahé organized an association with the above title. G. S. Burrell, was elected President, Isaac Post, Vice-President, and Isaac C. Squier, Secretary. Various matters connected with the commencement of the Club having been disposed of, a second meeting was appointed for Nov. 16th, and the President was requested to deliver an address prior to the discussions. This meeting was held according to appointment, an able

address delivered by Mr. Burrell, and discussions held on various matters of interest to the farming community. Resolutions were passed recommending that agriculture be taught as one of the branches of a common school education, and requesting the County Council to offer prizes to such pupils as may excel in that particular branch of study. The next meeting of the Club will be held on the evening of Dec. 20th, when the subject of "Renovation of Lands" will be the topic under discussion.

This is a movement in the right direction, and one which we trust will be imitated in many localities the present winter. One of the best means for the diffusion of practical and useful agricultural knowledge is the formation and efficient working of these Clubs.

Juvenile Papers.

SUNDAY SCHOOL DIAL.—This is an excellent illustrated monthly paper for children, which has been for some time in existence, and has attained an established character.

A new volume will be commenced in January, 1865. It is devoted to the instruction and the religious education of the young, irrespective of sect or party. Its promoters solicit the kind and earnest efforts of all who take an interest in the welfare of young people to enlarge the subscription list—the commencement of a new volume presenting a most favourable opportunity for so doing. The *Dial* circulates in Sabbath-schools connected with the various churches of the land, from Gaspe to Goderich; and that it is well received, and worthy of an extensive support, is manifest from the numerous commendations of the press.

TERMS—(cash strictly in advance).—For a single copy, or any number separately addressed, each, 15 cents per annum; for 11 copies to one address, \$1.50; for 22 copies to one address, \$3; for 33 copies to one address, \$4.50, and so on in like proportion. Postage free. Orders and communications to be addressed, post-paid, to Mr. A. Christie, box 696, Toronto.

MESSAGE FOR THE YOUNG.—This is a new "Child's Paper," the January number of which is just out. It is intended for the use of Sabbath-schools, and the young generally. It is got up in good style, with illustrations. The prospectus states that each number will contain several cuts, a piece of music, a large amount of interesting reading matter, with scripture questions, enigmas, &c. A series of Sabbath-school lessons will also be published in it. It is entirely un denominational in character, adapted to the use of Canadian schools, and as there is no postage upon such papers when issued in Canada, its cost will be but trifling. Enquiries and orders to be addressed to "Message Office, Toronto."

At the agricultural competition of Vaucluse, in France, held at Thor, last summer, the prize for ploughing was carried off by a girl of 20 years.

THE ILLUSTRATED REGISTER OF RURAL AFFAIRS FOR 1865 published by Luther Tucker & Son, of Albany, N. Y. is out. Its table of contents promises a rich and varied store of good things. On receipt of 25 cents at the *Witness* book store, Montreal, it will be sent to any address, post-free.

OUR FRIENDS from the country who may have occasion to try the virtues of vapour and medicated baths, can do so at Dr. Agnew's bathing establishment, corner of Yonge and Adelaide Streets. These baths are highly recommended for skin and other diseases.

CHICORY.—This is now one of the American farm products, and is said to be superior to the imported. We have seen a quotation of "Illinois Chicory," at 11c per pound. This is the roots, cut and dried, not roasted for use. The roots grow somewhat like parsnips, and about as great a yield per acre, and by the aid of a kiln, would be dried and prepared for market as easily as peaches.

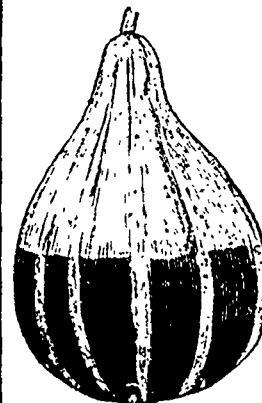


Green-house Culture of the Mimulus.

The seed should be sown on a moderate heat, and as soon as the plants appear they should be potted singly into thumb pots, filled with light rich soil, and watered freely. As soon as the roots fill the pots, they will need to be shifted to those of a larger size, and on up to the size in which it is intended to have them flower. Now, each pot may be placed in a saucer which should be kept full of water. When the flowers appear they will require to be kept shaded, and liberally supplied with air, in short the treatment is much the same as for herbaceous calceolarias, except that more water must be supplied. If any of the plants yield flowers of such beauty and excellence that it is desired to propagate from them, it can be very easily done by taking cuttings of three joints in length, which can be put into pots filled with light leaf mold and loam, mixed with a little sand. These pots should be plunged in a gentle heat and kept close until the cuttings are rooted, when they may be potted off. By this means a good display of this very showy flower may be had, the whole secret of success being dependent upon keeping the plants from the direct heat of the sun, and giving them an unfailling supply of water at the roots.

Miniature Striped Gourd.

Among the new and interesting things recently introduced is the *new Miniature Striped Gourd*. The



fruit is about three inches in circumference, and very symmetrical. The upper portion is of a yellow or bright orange, and the lower part of a deep green, the dividing line as nicely drawn as could be done with the pencil. It has also regular stripes of a cream colour as shown in the engraving, running from the apex to the base at equal distances, and about a quarter of an inch in width. This

little gourd makes a very pretty ornament for trellis work, and is deserving of some attention. It will perfect its fruit in any warm situation.

The Best Soil for Grape Vines.

A WRITER in the *Florist and Pomologist* starts the inquiry whether the geological formation from which we select soil to make our vine borders influences the size and quality of the grapes, altogether irrespective of mechanical arrangement? The question was suggested to that writer by the difference so apparent in his own vine borders, several of which were of soil from the magnesian limestone, and one from the old red sandstone. The difference was not in the growth of the vine, but in the berries and bunches, and which could not be attributed to difference in manures, &c., for they were all manured alike.

The border composed of soil from the old red sandstone was planted with Black Hamburg, Buckland Sweetwater, and Golden Hamburg, and for nine years has produced fruit far superior to the vines of