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NOTICE.—The subscription to the *Illustrated Journal of Agriculture*, for members of Agricultural and Horticultural Societies, as well as of Farmers Clubs, in the province of Quebec, is 30c annually, provided such subscription be forwarded through the secretaries of such societies.—**EDITORIAL MATTER.** All editorial matter should be addressed to A. R. Jenner Fust, Box 109, Lachine, Que.—or to the Director of Agriculture, Quebec.

OFFICIAL PART.

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To ARTHUR R. JENNER FUST, ESQ.,
UPPER LACHINE, QUE.

Rothamsted—St. Alban's, April 4th, 1888.

Dear Sir,—We shall publish in a very short time a paper on the assimilation of nitrogen by leguminosæ, in which we shall give a review of all the recent experiments carried out in Germany, France and elsewhere, this will be followed by our own results. If the various experiments are correctly carried out, there can be no doubt that these plants do obtain large amounts of nitrogen from atmospheric sources. As far as our own experiments are concerned, a soil or an atmospheric source would explain them equally well. Some of our experiments prove that in a soil very rich in organic nitrogen cropped continuously with leguminosæ, the reduction of the nitrogen in the soil has been very large, and this reduction has taken place principally in the surface soil. On the other hand, in ordinary soils poorer in nitrogen, the removal of

considerable quantities of nitrogen in a leguminous crop has left the top soil decidedly richer in nitrogen. The nitrogen must have come either from the atmosphere, or the subsoil. It is very unfortunate that, all over, subsoils vary so much in character and composition that analysis is almost useless. Assuming that leguminosæ do take nitrogen from the air, when grown in an artificial soil deprived of its nitrogen, we are a long way from showing that it does the same in an ordinary field. At the present moment, I think it would be advisable to keep your mind open on the subject: this is really what we do. Yours truly,
J. B. LAWES.

Meeting of the Société d'industrie laitière.

The annual meeting of the above society was held at St. Hyacinthe on the 11th and 12th of January last. It does not seem to have been so numerously attended as usual, by the farmers, but the number of professional cheese- and butter-makers present was very great.

After the opening address of the President, the Hon. B. de la Bruère, the well-known entomologist, M. l'abbé Provancher, read a paper on the *insect- and vegetable-parasites of cheese and butter*. The Abbé charged these tiny organisms with injuring the agricultural-products of the province of Quebec to the extent of \$10,000,000 a year! Perfect cleanliness, he said, was a sure preventive against the attacks of these pests.

The report of the committee for examining the samples of butter stated that, in their opinion, butter from cream sixty-six hours old, well churned, and washed when in grain, should only be worked once. Cream slightly acid, produced butter of a higher flavour than when perfectly fresh.

M. J. C. Chapais read a paper on the general relations