THE

Canadian Agriculturist,

OR

URNAL AND TRANSACTIONS OF THE BOARD OF AGRICULTURE

OF UPPER CANADA.

OL. XIII. TORONTO, JANUARY 16, 1861. No. 2.

eeding of Stock as a branch of Farm Management.

There is no department of the economy of the m more important than that which relates to e feeding and management of the domesticated imals, and there is none, perhaps, in this coun-, so little understood, or practically regarded. late years, since the introduction of pure and pensive breeds, more attention has been paid this subject, and here and there may be found m buildings in connection with a system of nagement adapted to the requirements of the esent advanced state of knowledge, and recent provements in these matters.

An able paper on this subject appeared about ear since in the *Highland Society's Journal*, Professor Anderson, from which we make the lowing abridged divisions :—

Properties of Food.—Practically, the pro-m which the feeder has to solve is, how to ply his cattle with such food, and in such ntities as to insure the largest amount of in-ase with the smallest possible loss. And for purpose it is necessary, not merely to select largest quantity of nutritive matters, but to nd to the proportions in which they are ed, and to restrain as far as possible all those tions which are productive of waste.

ll the different kinds of food consumed by ivorous animals are found to present a gene similarity in composition. They are com-d of a nutritive and an indigestible part; the latter consisting generally of woody fibre, which appears to be quite incapable of assimilation.. It is most abundant in the herbaceous parts of plants, as in the straw of the cereals and the stems of the grasses, and is almost entirely absent in the grains when deprived of their outer husks, as, for instance, in wheat flour. The nutritive part always consists of a mixture, in very variable proportions, of several substances, which may be separated by different chemical processes.. However much the relative quantities may vary, every food is found to contain at least three different substances, which are members of the three great classes into which the nutritive constituents of food may be divided, and which have received the names of the nitrogenous or albuminous, the saccharine or starchy, and the oily substances.

These classes of food constituents perform two different functions. The nitrogenous matters are employed to counter-balance the waste of the tissues, and to increase the quantities of lean flesh or muscle; and hence have been called the flesh forming substances. The fatty and saccharine compounds, on the other hand, serve to maintain the process of respiration, and the animal heat, and for this reason have received the name of the respiratory or heat-producing elements. They supply also the fatty matters stored up in the body, which form a very large proportion of the weight of the animal.

It is sufficiently obvious that, as the two great functions of nutrition and respiration must pro-