

are only partially attributable to the judicious selection of the grasses and clovers. The chief causes are that the continuous use of manure has put the land into good heart, and cultural operations have allowed the atmosphere to set free the elements which grasses readily assimilate. The third or fourth year is generally regarded as the critical time for a permanent pasture. There are, unfortunately, plenty of instances where improper seeding or starved land renders a profitable pasture impossible. To these preventable causes I am not now alluding, but to soils which, in despite of fair treatment, agglomerate and become impervious to atmospheric influences, and refuse to give up the necessary elements for the free growth of grasses.

Apart, however, from this question, of an unsuitable soil, there are weighty reasons for the adoption of a system of alternate husbandry. Two-thirds of many farms might with advantage always be in artificial grass. A great saving would be effected in tillage operations, horseflesh and labour. The land would break up at the end of the term in excellent condition and full of clover roots as a store of nourishment for the succeeding grain or corn crop. The custom of maintaining agricultural holdings that are almost entirely arable or almost entirely pastoral, either in this country or in the old country, has failed to meet the necessities of our time. What is wanted now is a combination of arable and pastoral husbandry, so that when grain does not pay and stock is profitable, or vice versa, each occupier may obtain benefit from one branch of his business. The grazier would be profited in being able to winter his own stock, instead of selling it to make a winter's manure for the arable farmer. On the other hand, the arable farmer would not then be compelled to sell his stock as soon as his roots were exhausted, or pay the grazier to summer the animals for him.

WALTER S. G. BUNBURY,  
*Compton Model Farm.*

*(To be continued)*

## The Poultry-Yard.

### SUNLIGHT IN WINTER

The hens will always seek the warmth of the sun on a cold day, and especially if there is a high wind as they are easily affected by cold draughts.

The sunny spot of a shed, which is open on one side only, is preferred. If such a place could be provided for the hens, even if in no other manner than by arranging some stalks or straw on poles, it would greatly induce laying in winter when eggs are high. Hens will not lay well in cold weather unless they have a warm place, and not only does this apply to the night, when they are on the roost, but during the day also. An open shed, and the warmth of the sun pouring down on the hens, will induce them to dust and scratch, exercising themselves briskly, which in turn promotes the appetite and aids digestion. To keep hens in a cold poultry house, where the sunlight gets in only during a portion of the day, while the hens are chilled until the sun returns the following day, is to call for a large amount of food in order to promote bodily warmth, while the number of eggs secured will be small; but with plenty of light and warmth, there will be health and a regular supply of eggs.

S. J. A.

### WHERE THE LOSS OCCURS

The loss in keeping poultry is mostly in the winter season, and results from keeping over until spring stock that consumes food without giving any return. Such stock consists usually of immature pullets and overfat hens, surplus cockerels, late hatched chicks and moulting hens. The food is not the only consideration in the matter, as the room is also taken up and occupied. A dozen laying hens in the entire flock have the duty of convincing their owner that poultry pays, while the others eat their share of the food and refute the impression made by the profitable members of the flock. Nearly all poultry houses contain unprofitable stock, and the only reason for allowing such is the daily expectancy of each beginning the work of egg production. There is no halfway house in the matter of poultry keeping, and but little reliance can be placed on the future. It is the everpresent that we must meet, and no one should attempt to wait for a profit.

The best hens that are known will find it difficult to recover lost time, and this is more applicable to the surplus stock that give no promise until spring comes again. Loss of time is loss of profit, and the safest and surest way of avoiding loss is to keep no unproductive stock.