

his essay on this subject, in the seventh volume of the English AGRICULTURAL SOCIETY'S JOURNAL, where they refer to processes of which we have no experience:—

"THATCHING.—The price for thatching ricks is 1d. a yard, or from 10d. to 1s. the square."

"FENCING.—All kinds of hedging, and the laborer required in keeping live and dead fences in repair, and the pulling down of old fences, readily admit of payment for bank work by lineal measurement. In the management of old fences, one of the practices of this part of the country is to cut down the old thorns even with the surface, and then to make good the lower soil which has wasted away from the roots. The price per rod varies with the age and thickness of the hedge, and with the quantity of seed required to make good the bank. From 6d. to 8d per rod is usually paid. This includes topping the bank with the old thorns, as a dead fence. Three, or three and a half rods will be an average day's work; 20d. to 22d. a day may be reckoned a fair days wages for hedging work. Breasting over hedges will cost him 3d. to 4d. per rod, but the price depends entirely on the size of the hedge. Trimming hedges, or the cutting of the young shoots with a light hook may be done for ½d. or ¾d. a rod. If shears are used, the cost will be rather more. When fagots are made they are paid for by the score; 6d. a score is paid for the most general size, but the price, of course, varies little with the size and length."

"FILLING, RUNNING, CARTING, AND SPREADING CLAY, marl, or chalk, are frequently let out by the job to men who, at a certain price per yard, agree to find horses, carts, and men, and food for the horses, with the exception that the employer allows grass and straw chaff. The quantity spread is ascertained by measuring the hole it is taken from; and the price per yard for earthing one furlong is, for clay 7d—1d. being added for every additional furlong."

"BURNING PEAT ASHES, an uncertain employment in our fickle climate, is generally paid at the rate of £5 per 1000 bushels, or 40 cubic yards."

We conclude with but one additional observation. Of course, measure work is paid for in money, and it is gradually better for all parties that it should be paid for in money alone. Giving beer or cider in addition to money, generally diminishes the sum paid more than is justified by the value of the drink; and these liquors are not of that strengthening character, which some are inclined to believe. While, however, we approve of paying for piece work in money alone, that opinion by no means extends to the payment of our constant day laborers. Amongst a steady, and, if we may use the word, an EDUCATED class of farm laborers, possibly money wages may be the best under all circumstances; yet, taking laborers as we find them, they are better off, both in a physical and moral point of view, where that system of payment, partly in grain, and partly in money, prevails, which obtains, as we have said, in Northumberland and some of the Scottish countries.

## ON FEEDING AND HOUSING FATTENING CATTLE.

A Lecture was delivered by Dr. Anderson, in connection with the Highland and Agricultural Society of Scotland, in the Justiciary Hall, the Duke of Roxburgh in the Chair.

We have extracted the talented Professor's remarks "on the best modes of feeding and housing fattening cattle, and the breeds most suitable for different districts."

The lecturer observed—I have selected for the subject of the following address a summary of the discussions at the monthly meetings of the Highland Society, during the past winter.

On the first head, that of housing, all refer to the gradual change which has taken place in the mode of accommodating fattening cattle, and the abandonment of large open courts containing from 10 to 20 cattle, and the introduction first of hammels or small courts with sheds for the accommodation of 2 or at most 3 cattle, then of stalls, and still more recently of boxes. The concurrent testimony of all is strongly condemnatory of the first of these practices, and reference is very distinctly made to the scientific facts on which its inferiority depends. It has been conclusively established by scientific enquiry, that the natural temperature of the animal body is sustained by the consumption of a certain quantity of its food, which during the process of respiration undergoes a change chemically identical with that which takes place in the act of combustion. Now in the animal body, the temperature is always the same, whatever be that of the surrounding air. Thus, if you examine an ox by means of the thermometer during the dead of winter and the height of summer, you will find the temperature to be always the same, and on Fahrenheit's thermometer it will be somewhere about 100 degrees, while the temperature of the air may in the one case be under the freezing point, and in the other as high as 70 or 80 degrees. Now it is very obvious that in the former case, a much larger quantity of food must be consumed, to sustain the temperature of the animal at 100 degrees, than is necessary in the latter, just as a room requires more fire to keep it hot in winter than during the warmer seasons of the year; and it naturally follows, that if we keep the animal in a warm locality, we economise the fuel, and require to supply a less quantity of food, to keep up the temperature of its body at the natural standard.

Now this is exactly what is effected by the improved methods of housing cattle. In the large open court formerly universally employed, they were exposed to every vicissitude of the weather, while in the smaller courts with sheds, or still more, in houses they are protected from the extremes of temperature and an economy of food effected. But a certain quantity of food is capable, under favourable circumstances of producing a certain quantity of fat. If, however, the temperature of the air falls, and an additional quantity of fuel is required to sustain the animal heat, science has shown that the elements so consumed or burnt off, are exactly those which under other circumstances, would go to the formation of fat. It is obvious, therefore, that if we keep the animal warm, we do what would otherwise be done by a portion of the food with which