

100,000 lambs and 100,000 rams, with the wool."

They prepared the provender for their horses and asses of chaff or cut straw and barley. Our translation does not explicitly state this, but it is clear in the Hebrew original. They tied up calves and bullocks for the purpose of fattening them, and were acquainted with the arts of the dairy. "Surely the churning of milk," says Solomon, "bringeth forth butter." The chief vegetable products cultivated by these eastern nations, were wheat, barley, beans, lentils, rye, the olive and the vine.

The scanty notices which we have of their tillage gives us no reason to doubt that they were skillful husbandmen. Their name for tillage (obed) emphatically expresses their idea of it; for it literally means, *to serve the ground*. And that the care and attention necessary were well sustained, is evidenced by the fact that David, for his extensive estate, had an overseer for the storehouse in the fields; another over the tillage of the ground; a third over the vineyards; a fourth over the olive trees; two to superintend his herds; a seventh over his camels; an eighth to superintend his flocks; and a ninth to attend similarly to the asses. Of their plowing we know that they turned up the soil in ridges, similarly to our own practice; for the Hebrew name of a husbandman signifies a man who does so. That they plowed with two beasts of the same species attached abreast to the plow, that the yoke or collar was fastened to the neck of the animal, and that the plow in its mode of drawing the furrows, resembled our own.

Their sowing was broadcast, from a basket, and they gave the land a second superficial plowing to cover the seed. Harrowing was not practiced by them. Russell, in remarking upon the mode of cultivation now practiced near Aleppo, says "no harrow is used, but the ground is plowed a second time after it is sown, to cover the grain." The after cultivation apparently was not neglected. They had hoes or mattocks which they employed for extirpating injurious plants or weeds. When the corn, or grain, rather, was ripe, it was cut with either a sickle or a scythe, was bound into sheaves, and was immediately conveyed in carts either to the threshing floor or to the barn. They never formed it into stacks. Those passages in the Scriptures refer exclusively to the thraves or shocks, in which the sheaves are reared as they are cut. The threshing-floors, as they are at the present day, were evidently level plats of ground in the open air. They were so placed that the wind might, at the time of the operation, remove the chief part of the chaff. The instruments and modes of threshing were various. They are all mentioned in those two verses of the prophet: "Fitches are not threshed with a threshing instrument, neither is a cart-wheel turned upon the cummin; but fitches are beaten out with a staff, and the cummin with a rod. Bread corn is bruised because he will not ever be threshing it, nor break it with the wheel of his cart, nor bruise it with his horsemen." When the seed was threshed by horses, they were ridden by men; and when by cattle, although forbidden to be muzzled, yet they were evidently taught to perform the labor. The instrument was a kind of sledge made of thick boards, and furnished underneath with teeth of iron. To complete the dressing of the corn, it was passed through a sieve and thrown up against the wind by means of a shovel. The fan was, and still is, unknown to the eastern husbandmen, and when that word is employed in our translation of the scriptures, the original seems to intend either the wind or the shovel.

Of their knowledge of manures we know little. Wood was so scarce that they consumed the dung of their animals. Perhaps it was this deficiency of carbonaceous matters for their land that makes an attention to fallowing so strictly enjoined.

The landed estates were large, both of the kings and of some of their subjects, for we read that Uzziah, King of Judah, "had much, both in the low country and in the plains; husbandmen also, and vine-dressers in the mountains and in Carmel, for he loved husbandry."

THE AGRICULTURE OF THE GREEKS.

Agriculture was too important and too beneficial an art not to demand, and the Greeks and Romans were nations too polished and discerning not to afford it, a very plentiful series of presiding deities. They attributed to Ceres, as their progenitors, the Egyptians, did to Isis, the invention of the arts of tilling the soil. Ceres is said to have imparted these to Triptolemus of Eleusis, and to have sent him as her missionary around the world to teach mankind the best modes of plowing, sowing and reaping.

In gratitude for this, the Greeks, about 1356 years before the Christian era, established in honor of Ceres the Eleusinian Mysteries, by far the most celebrated and enduring of all their religious ceremonies; for they were not abolished at Rome until the close of the fourth century. Superstition was a prolific weakness, and consequently by degrees, every operation of agriculture, and every period of the growth of plants, obtained its presiding and tutelary deity. The goddess Terra was the guardian of the soil; Stercutius presided over manure; Volutia guarded the crops while evolving their leaves; Flora received the still more watchful duty of sheltering their blossoms. They passed to the guardianship of Lactantia when swelling with milky juices; Rubigo protected them from blight, and they successively became the care of Hostilina as they shot into ears; of Natura as they ripened, and of Tutelina when they were reaped. Such creations of Polytheism are fables, it is true; yet they most please by their elegance, and much more when we reflect that is the concurrent testimony of anterior nations, through thousands of years, that they detected and acknowledged a great First Cause.

Unlike the arts of luxury, Agriculture has rarely if ever been subject to any retrograde revolutions. Being an occupation necessary for the existence of mankind in any degree of comfort, it has always continued to receive their first attention; and no succeeding age has been more imperfect, but in general more expert, in the art than that which preceded it. The Greeks are not an exception to this rule, for their agriculture appears to have been much the same in the earliest brief notices we have of them as the husbandry of the nation of which they were an offshoot. The early Grecians, like most new nations, divided into but two classes—landed proprietors, and helots or slaves; and the estates of the former were little larger than were sufficient to supply their respective households with necessaries. There was, probably, not even a prince or leader of the Greeks who did not, like the father of Ulysses, assist with his own hands in the operations of the farm. Hesiod is the earliest writer who gives any detail of the Grecian agriculture. He appears to have been the contemporary of Homer, and in that case to have flourished about nine centuries before the Christian era. His practical statements, however, are very meagre. Xenophon died at the age of ninety, 359 years before the birth of our Saviour. The following narrative, if not otherwise specified, is taken from his *Æconomics*. In his time the landed proprietor no longer lived for his farm, but had a steward as a general superintendent, and numerous laborers; yet he always advises the master to attend to his own affairs. "My servant," he says, "lead my horse into the fields, and I walk thither for the sake of exercise in a purer air; and when arrived where my workmen are planting trees, tilling the ground, and the like, I observe how everything is performed, and study whether any of these operations may be improved." After his ride his servant took his horse and led him home, "taking with him," he adds, "to my house such things as are wanted; and I walk home, wash my hands, and dine of whatever is prepared for me, moderately. No man," he continues, "can be a farmer till he is taught by experience. Observation and instruction may do much, but practice teaches many particulars which no master would ever have thought to remark upon. Before we commence the cultivation of the soil," he very truly remarks, "we should notice what crops flourish best upon it, and we may even learn from the weeds it produces what it will best support. Fallowing or frequent plowing in spring or summer is of great advantage." And Hesiod advises the farmer always to be provided with a spare plow, that no accident may interrupt the operation. The same author directs the plowman to be very careful in his work. "Let him," he says, "attend to his employment, and trace the furrows carefully in straight lines, not looking around him, but having his mind intent upon what he is doing." Theophrastus evidently thought that the soil could not be plowed and stirred about too much, or unseasonably; for the object is to let the earth feel the cold of winter and the sun of summer, to invert the soil and render it free, light and clear of all weeds, so that it can most easily afford nourishment. Xenophon recommends green plants to be plowed in, and even crops to be raised for the purpose, for such, he says, "enrich the soil as much." He also describes the properties which render dung beneficial to vegetation, and he also dwells upon composts. Xenophon recommends the stubble at reaping time to be left long if the straw is abundant, "and this

if burned, will enrich the soil very much, or it may be cut and mixed with the dung. The time of sowing must be regulated by the season, and it is best to allow seed enough."

Weeds were, even then, carefully eradicated from amongst their crops, for besides the hindrance they are to the corn or other profitable plants, they keep the ground from receiving the benefit of a free exposure to the sun and air." Homer describes Laertes as hoeing when found by his son Ulysses. Water courses were made to drain away the wet, which is apt to do great damage to corn.

Homer describes the mode of threshing grain by the trampling of oxen, and to get the grain clear from the straw, Xenophon observes "the men who have the care of the work take care to shake up the straw as they see occasion, flinging into the way of the cattle's feet such corn as they observe to remain in the straw." From this author, and from Theophrastus, we can also make out that the Greeks separated the grain from the chaff by throwing it with a shovel against the wind. So far you have had an insight into the agriculture of the Greeks, and we next proceed to the last division, that of the Romans.

(To be Continued.)

On the Wing.

We took a drive into the Township of Westminster on the day of Mr. Frank Shore's sale of Shorthorns, Grades and Cotswolds. This sale had been well announced to the farmers of Canada, and a large and very valuable lot of stock was disposed of. The attendance was large, consisting of the leading stockmen and farmers of Middlesex, and a large number from different counties; in fact, there were some from Manitoba and Quebec, and persons from most of the counties in Ontario were to be seen.

This stock was all in a healthy and breeding condition. The sale was honorably conducted. Animals with pedigrees, that were eligible for entering in the new Herd Book, were sold as Shorthorns, and those that had been crossed for a number of years and had been entered or were eligible for entry in the old Herd Book, were sold as Grades, or what some term Scrubs or Mongrels. But what appeared remarkable to many was to see the Scrubs or Grades command higher figures than many of the animals that had long pedigrees. This showed that the practical farmer preferred a fine animal rather than the pedigree of the animal. Fair prices were realized, but no fancy prices were paid. Several animals sold at \$200 and \$300, and Cotswold sheep at \$50 and \$55 per head; the Cotswolds commanding these figures were imported.

Mr. Shore intends going to England during the spring or summer, with the object of importing the nucleus of a fresh herd.

We had accepted an invitation to attend an Agricultural Dinner got up by the members of the North Branch Agricultural Society of the County of Huron. The dinner took place at Goderich, the County Town of Huron. It was largely attended by the leading farmers of the county, and speeches were delivered touching on agricultural subjects; loyal toasts were drunk, and one of the pleasantest and perhaps most beneficial meetings was held that Goderich had witnessed for many a year. The members of the County Council were at the dinner; also many of the county officials.

The County of Huron is one of the largest counties in Ontario. It is divided into three agricultural divisions, each of which appears to have an honest, stimulating motive that works like a charm; that motive appears to be to excel in raising the best stock and the best crops, and making the best returns from the land. The land in the county is of excellent quality. We know of no county making more rapid strides in agricultural advancement than Huron, and in no part of this continent, that we have ever heard of, has the custom of having an annual agricultural dinner been so long established nor so beneficially main-