

in the world in which we dwell. For in some of the other planetary worlds belonging to our system, the intelligent beings with which they are peopled may stand in no need of that nocturnal repose which is necessary for man; their physical powers may be incapable of being impaired, and their mental energies may be in perpetual exercise. And in some of those bodies which are surrounded with an assemblage of rings and moons, as the planet Saturn, the diversified grandeur of their celestial phenomena, in the absence of the sun, may present a scene of contemplation and enjoyment far more interesting than all the splendours of their noonday. Besides, had the planets no motion round their axis, and were both their hemispheres supposed to be peopled with inhabitants, their physical state and enjoyments would be as opposite to each other as if they lived under the government of two distinct independent beings. While the other class was basking under the splendours of perpetual day, the other would be involved in all the horrors of an everlasting night—while the one hemisphere would be parched with everlasting heat, the other would be bound in fetters of eternal ice. And in such a globe as ours, the motion of the tides, the ascent of the vapours, the currents of the atmosphere, the course of the winds, the benign influence of the rains and dews, and a thousand other movements, which produce so many salutary and beneficial effects, would be completely deranged. Hence we find, that on all the planetary bodies on which spots have been discovered, a rotatory motion actually exists in the secondary as well as in the primary planets, and even in the sun itself, the centre and mover of the whole; in which arrangement of the Almighty Creator the evidences of wisdom and design are strikingly apparent."

GOD'S WISDOM SEEN IN THE SUN'S POSITION.

"If the sun were much nearer us than he is at present, the earth, as now constituted, would be wasted and parched with excessive heat; the waters would be turned into vapour, and the rivers, seas, and oceans would soon disappear, leaving nothing behind them but frightful barren deserts and gloomy caverns; vegetation would completely cease, and the tribes of animated nature languish and die. On the other hand, were the sun much farther distant than he now is, or were his bulk, or the influence of his rays diminished one half of what they now are, the land and the ocean would soon become one frozen mass, and universal desolation and sterility would overspread the fair face of nature, and instead of a pleasant and comfortable abode, our globe would become a frightful desert, a state of misery and perpetual punishment. But herein is the wisdom of God displayed, that he has formed the sun of such a determinate size, and placed it at such a convenient distance, as not to annoy, but to refresh and cheer us, and to enlighten the soil with its genial influence; so that we plainly perceive, to use the language of the prophet, that "He both established the world by his wisdom, and stretched out the heavens by his understanding."

RICHES NO PROOF OF MORAL WORTH.

The glitter of riches often serves to draw attention to the worthlessness of the possessor, as the light emitted by the glow-worm reveals the insect.

Agriculture.

GRAIN.

(From descriptive Catalogue of the Quincy Hall Seed Store.)

BARLEY—Grows well on a light, rich soil, but it is probably more tenacious of a fertile clay. Both wheat and barley affect a clayey loam, and contrary to the prevalent opinion in this country, we must believe with antiquity, "Dame Ceres joys in heavy ground, and Bacchus in the light." But the ground for barley should be well pulverised, and be naturally rich, or made so from former years' cultivation. No manure should be added to the crop itself, unless it be a light top dressing of liquid or solid manure after it is up and on its way. The sowing should be done as soon as the ground can be worked advantageously in the spring, at the rate of 2 or 3 bushels to the acre. Poor grounds, heavy clays, and late sowing require the heaviest seeding. A previous soaking in a strong solution of saltpetre materially helps forward the growth. The four or six rowed is the best kind.

BUCKWHEAT.—This crop is generally cultivated on light land.

It may be sown in the middle of May. Some sow it as late as August with wheat, and find that it will frequently mature and yield a good crop without injury to the wheat. It is a valuable crop for family use, farm stock, and poultry. It has heretofore been used to some extent as a fertilizer, being ploughed in green, but the superior quality of clover for this purpose has superseded it entirely of late years. It is sown either in broad cast or in drills, at the rate of 1 bushel per acre in the former, and 2 or 3 pecks if in the latter case.

MILLET.—This requires a dry, light soil; but a heavy crop can only be realized on a rich one. It is sown 1st May to 20th June to ripen the seed; but a crop of hay may be secured by sowing as late as the last of July. It may be sown in drills or broadcast. Owing to its ripening unequally, and the consequent loss of harvesting, injury by birds, &c., it is often raised for grain, but is usually cut while the seed first begins to ripen. It will produce from 1½ to 2 tons fodder per acre, equal in value to grain, and from 20 to 60 bushels of grain, equal to corn for many kinds of feeding. Sown from 16 to 24 quarts per acre. When the ground is in proper condition, and the season favourable, the former quantity in drills and 16 quarts broadcast will insure a fair crop.

OATS.—These do best on a very strong soil, and clayey loams are well adapted to them. If ploughed in the fall they may be sown on the field without further stirring the land, as early as the ground will admit of harrowing. They should, like all other grain, be cut as soon as the lower part of the stalk turns yellow. This secures the attachment of the grain to the head without wasting, till harvested, and gives a better quality of fodder for the stock. The common white oat is better than the black, though this last is extensively cultivated. If cut in a green state, the berry in the milk, the straw and grain make a fodder for horses equal to the best Timothy and clover hay. The imperial and the Bedford oats are considered the best. Sown from 3 to 4 bushels per acre.

RYE.—This grain is never advantageously raised unless upon dry, light soils. These may be rich or poor, a crawling sand or once floating bog, if the former is somewhat compacted by ashes or saline or putrescent manures, or by the accumulation of vegetable matter, and the latter has been thoroughly drained and received a coating of sand or loam. It should be sown from the middle of August to the middle of September. Rye is useful for soiling, or feeding off on the ground; and, when the soil is good, it may be thus fed in the fall and again in the spring, and afterwards allowed to ripen, when it will often produce a good crop of grain. It is sometimes sown between the corn hills in August, and by harrowing between the rows each way, it may be brought into a state of forwardness by the time the corn is taken off the ground; or the corn may be cut up by the root and stocked on the field, and allow the rye to occupy the whole space. Sown from 5 to 6 pecks per acre.

WHEAT.—This is sown from the 15th of August to the 10th November; but the most suitable time in a northern latitude is from the 5th to the 20th of September. If sown earlier it is liable to attack from the fly; if later it does not tiller so well, and is more liable to winter-kill. Wheat, and indeed all small grains, yield best when cultivated in drills from 6 to 18 inches apart. Large crops have been raised sown in drills 3 feet apart. It is not near so liable to rust or mildew when sown in drills, as the air circulates more freely among it, giving a waving motion to the stalk, which is pretty certain to prevent mildew and rust. These diseases usually attack the wheat in calm weather, when the sun comes out hot after a rain. The grain should be cut when the stalk first changes colour near the ground. The berry is then in its dough state; but if cut then it will be found to be heavier, plumper, and yield more flour of a better quality than permitted to stand longer, while the straw is more valuable for feeding. Wheat intended for seed should be allowed to stand till it fully ripens. A clover ley previously limed or plastered, is the best preparation to turn under for wheat. Calcareous soils, that is, such as have lime in them, are the best for this grain, and where these do not exist maturely, lime, ashes, charcoal, or plaster, in suitable quantities, must be added. Before sowing the wheat should be thoroughly cleansed, and every particle of foreign wheat removed. Then wash it three successive times in the strongest brine, mixed with a coating of slacked lime, and spread out to dry. If spread out in the sun it will dry in two or three hours, if in the shade it will require longer. This preparation