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GOODSELL — THE CHANNEL ISLANDS AND THEIR AGRICULTURE

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*The Channel Islands and
their Agriculture.*

BY

HENRY H. GOODELL, LL.D.,

OF AMHERST, MASS.

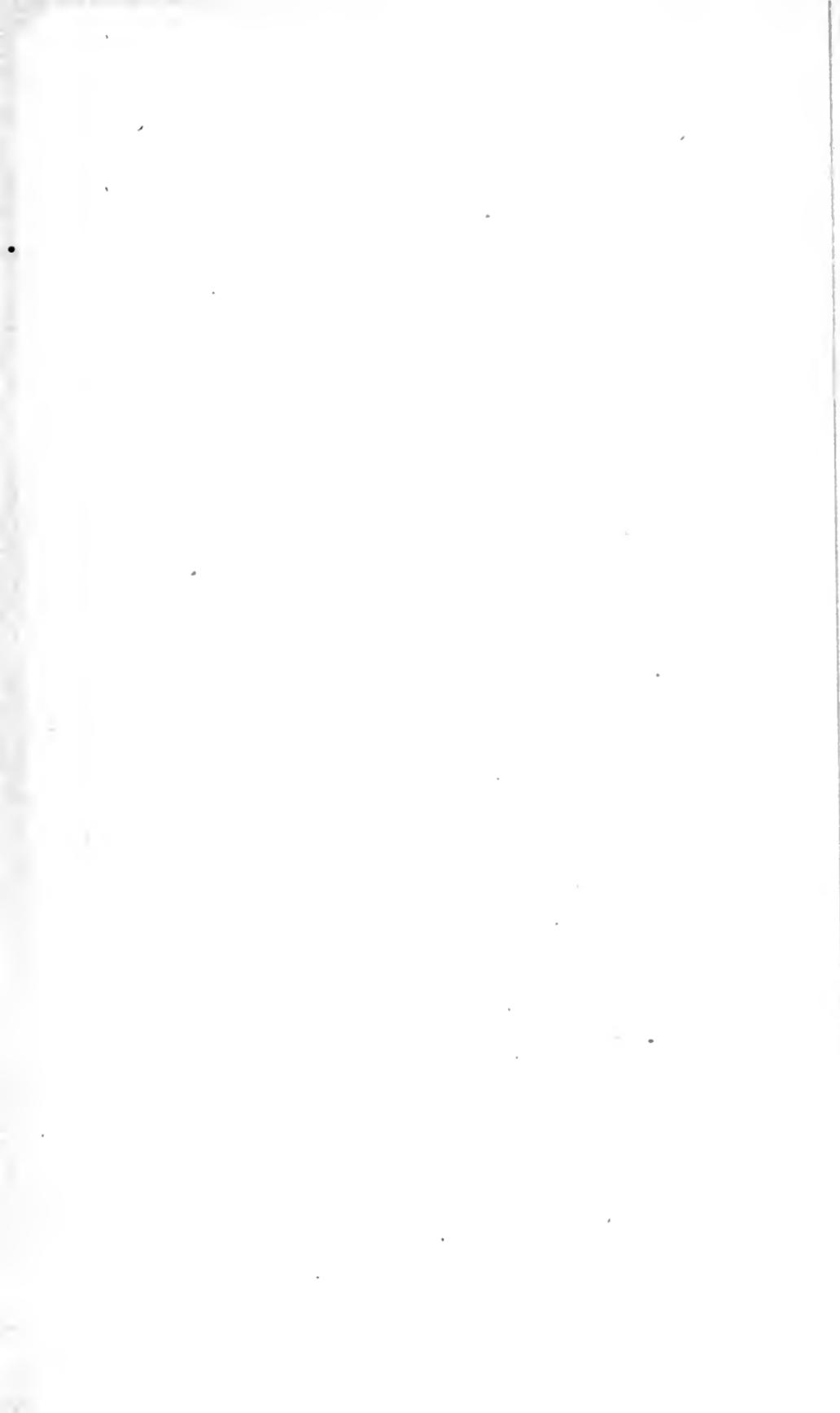
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THE CHANNEL ISLANDS AND THEIR AGRICULTURE.

BY HENRY H. GOODELL, LL.D., AMHERST.

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The subject assigned me to-night is the Channel Islands and their agriculture. There is no more interesting spot on the face of the globe, and none that displays sharper contrasts. Geographically belonging to France, territorially they form an outlying dependency of the British crown. Apparently most barren and unfertile of soil, they yield crops rivalling in richness those of the virgin plains of our own great West. Rent and torn by the waves that rush in upon them from the Atlantic, lashed by the reflux surge from the coast of France, and swept by the boiling tides that under favoring circumstances rise to a height of over forty feet, they find in the floating sea wrack of the very waves which threaten their existence the chief element of their fertility. Lying at the very entrance of the English Channel, just where it broadens out and loses itself in the immensity of the ocean, and exposed to every wind that blows, they yet enjoy a climate so equable and mild that the flowers of the tropics bloom there the year round in the open air.

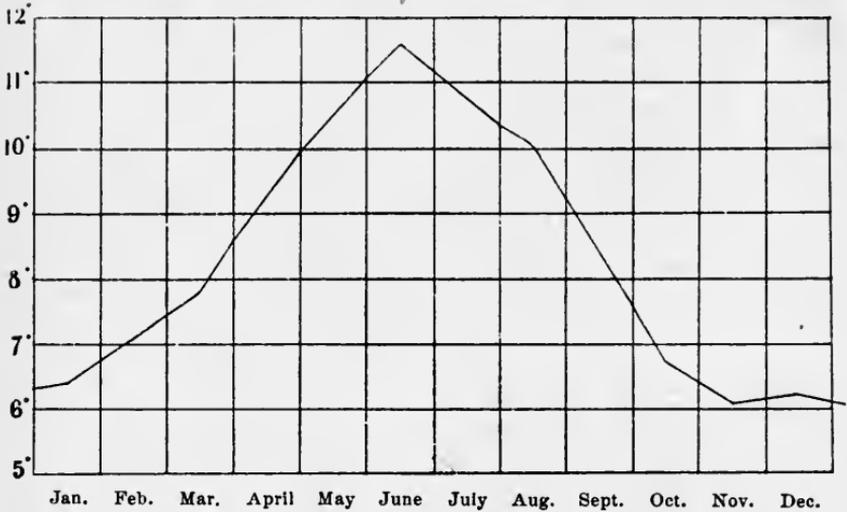
No less remarkable in their characteristics are the people. Calling themselves Englishmen, they yet speak a *patois* of French impossible to be understood by any one not native born, and compel its use in school and court. Blindly adherent to ancient law and custom, they have made themselves known the world over for the advanced position they have taken on all matters pertaining to agriculture. Jealously resisting every encroachment upon their liberties, and so independent that all laws affecting them have first to be passed upon and approved by their own *States* before becoming valid, they yet are the most loyal of subjects and tenacious in their support of the crown. The last of the great

French possessions united to England when William the Conqueror crossed the Channel and overthrew the Saxon dynasty, they have remained through all these years unshaken in their fidelity to the representatives of their hereditary sovereigns. Race, language, contiguity of territory, would seem to have allied them to Norman France; yet so slight was the bond that held them, that shortly after the separation we find this added petition in their litany: "From the fury of the Norman, good Lord deliver us." Undoubtedly in bygone ages, before subsidence had taken place, these islands formed a part of the continent, and were actually joined to France; but now they stand like sentinels, lone outposts, surrounded by rushing tides and raging seas, which in their ceaseless action have eaten out and swept away the softer and more friable rocks, leaving only a "fret-work of those harder barriers that still resist attack, and are enabled to present a bold and serried front against their relentless enemy."

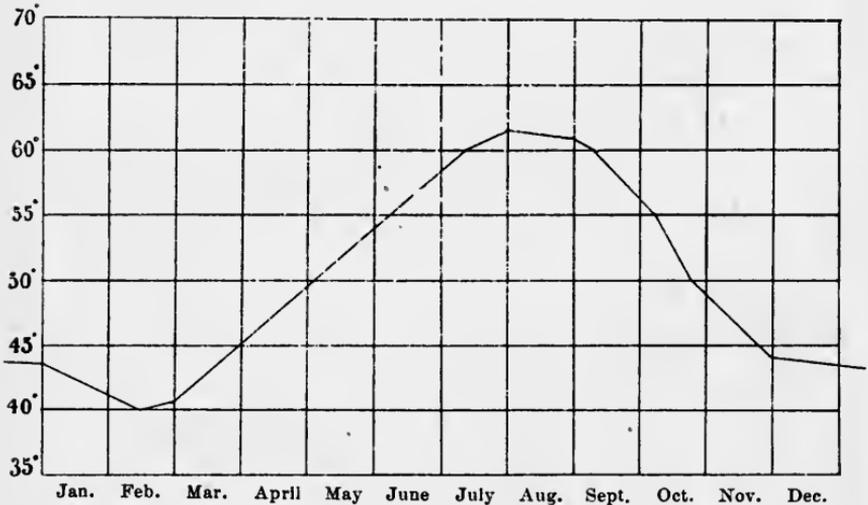
The Channel Islands are six in number, namely, Jersey, Guernsey, Alderney, Sark, Jethou and Herm, and lie one hundred miles south of England and fifteen from the shores of France, being well within a line drawn parallel to the coast, from the end of the peninsula on which Cherbourg is built. The two largest of these — Jersey and Guernsey — are the ones with which we shall concern ourselves to-night. Small in area, mere dots on the surface of the globe, they yet have won for themselves a name and place in the agriculture of every civilized nation of the world. The first, some eleven miles in length by five and a half in breadth, covers an area of 28,717 acres; the second, nine and a half miles in length by six and a half in breadth, contains about 19,705 acres. Of these areas scarce two-thirds is land that can be cultivated, for we must bear in mind that the formation is mostly granite, rising in cliffs from two hundred to four hundred feet, with deep indentations and wide encircling bays where the sea has eaten into the shore. From the elevated crest to the water's edge is a "wide margin of descent, upon which fertile soil cannot accumulate, and a poor and scanty pasturage, its only possible produce, is generally more or less overpowered by brake, gorse and heath."

As you approach the Jersey coast nothing more picturesque can be well imagined. Ten miles of granite cliff stretching along its northern exposure two hundred and forty to four hundred and eighty-five feet in height, while on the south eight miles of similar formation rise from two hundred to two hundred and fifty feet, and against this the waters madly foam and break and dash their spray far up the sides, rending and rifting them in every possible manner, or wearing out dark chasms and overhanging arches. There results from this formation a general slope and exposure to the south very favorable to vegetation. Furthermore, the whole island is intersected from north to south by a succession of ravines or valleys, gradually widening and increasing in depth, and forming a natural channel for the small streams taking their origin in the springs which everywhere abound. It has been said that the three primary elements necessary to the success of agricultural operations are skilful husbandry, a well-constituted soil and a genial climate. All three of these requisites Jersey possesses in the highest degree. Though resting on a bed of primary rocks of granite, syenite and schist absolutely wanting in organic remains, yet the soil is a rich loam, varying in lightness with the character of the underlying stratum. Even in the bays, where the sand driven by the winds has encroached upon the soil, the land is so successfully tilled, that St. Clements Bay has won for itself the title of the "Garden of Jersey." The climate is one of the most equable and mild in the world. Rarely does it fall below the freezing point, and there is but one instance on record of its reaching 83° . The ground seldom freezes more than an inch or two, and the slight snows serve to keep off the frost altogether. Winter there is none, but the spring is usually cool and late. The mean daily range of the thermometer is exceptionally small. Taking the average of ten years, it is found to be but 8.1° . The days of summer are not very hot, but the nights are comparatively warm, and there is hardly any chill in the night air at any season of the year. There is no recorded climate, and probably no climate whatever in north temperate latitudes, on either side of the Atlantic, that presents so small a daily range of the thermometer. Such is the opinion of an enthusiastic traveller.

Mean Daily Range of Each Month from an Average of Ten Years.



Mean Temperature of Six Years at Jersey during Each Month of the Year.



As a result of this, many kinds of plants and flowering plants and shrubs are at least a fortnight earlier than even in the warmer parts of England, and the ripening of fruit in the open air during July, August and September is invariably some days earlier than at Greenwich, although the summer is cooler than at that place. Another striking pecu-

liarity which doubtless has its effect upon vegetation is the rainfall. Taking the average of six years, rain is found to fall on one hundred and fifty days, but it most frequently occurs at night or early in the morning, seldom lasting through the day, thereby securing the maximum of sunshine. The mean annual rainfall is about thirty-three inches. Under these favorable conditions of temperature and moisture a flora that is almost tropical prevails. Fuchsias reaching the proportions of shrubs, rhododendrons twenty to twenty-five feet in height, araucarias, or monkey trees, as they are popularly designated, oleanders, yuccas, palms, azaleas and camellias flourish in the open air, while climate and soil appear to be particularly suitable for the cultivation of the dahlia. Finer specimens I have never seen. The laurestinus was in bloom in November, and fig trees and oranges were everywhere to be seen trained against the south walls of enclosures. It is a climatic law that in all places where the mean temperature is below 62.6° , the revival of nature in spring takes place in that month of which the mean temperature reaches 42.8° . On the island of Jersey this occurs in February. This again is a very important factor in the agricultural development of the place, for the early spring and the proximity of the great markets of London and Paris enable the inhabitants to dispose of their produce at a great profit. It is no uncommon thing for a man to pay for a piece of potato land as high a rental as two to three hundred dollars an acre, and sell his crop of four or five hundred bushels for \$1,000 or \$1,100. But this is not the end; for immediately after the gathering of the first crop the land is freshly manured and a second crop is planted, yielding from two-thirds to three-fourths the amount of the first. These results can only be secured by the application of large quantities of manure. Barn-yard manure and also artificial fertilizers are used; but the main dependence is placed upon the vraic or sea-weed. The old legend runs: "No vraic, no corn; no corn, no cows; no cows, no bread for children's mouths." This is either washed ashore by the action of the waves, or, at the period of maturity, is separated by bill hooks or sickles fastened on to long poles and drawn in by rakes with a head two or three feet wide

and handles twelve to twenty feet long. The cutting and gathering of the vraise is a general holiday, terminating usually in a frolic. It is only allowed twice a year: once in February, beginning with the first new or full moon and lasting five weeks; and again in June, beginning in the middle of the month and closing on the 31st of August. Whole families will frequently unite, and, going to some spot previously selected, work hard all day, the men standing up to their waists in water, using their unwieldy sickles and rakes, and the women and children dragging the prize up beyond the reach of the tide. With the coming of night the sea-weed is removed in carts, and then all hands, meeting at the house of some one of their number, spend the hours in dancing and singing. During the first four weeks of the summer cutting, only the poor, or those having no cattle, are allowed to gather this harvest of the sea. That cast up by the waves may be taken at all seasons by any person between the hours of sunrise and eight o'clock at night. About sixty thousand loads are gathered annually, valued for manurial purposes at about fifty cents per load. It is applied either fresh at the rate of ten loads to the acre, or in the form of ashes obtained by burning it, a load yielding about three bushels of ash. There are two species of this vraise, the *Fucus* and the *Laminaria*, and the following analyses will give an idea of their value:—

ANALYSES OF VRAIC.

	<i>Laminaria</i> <i>digitata.</i> (Per Cent.)	<i>Fucus</i> <i>vesiculosus.</i> (Per Cent.)
Water in the undried weed,	82.00	71.00
<i>Dry Weed.</i>		
Organic matter, per cent,	70.11	80.36
Soluble ash,	23.56	14.08
Insoluble ash,	6.33	5.56
	100.00	100.00
<i>Composition of Soluble Ash.</i>		
Sulphuric acid,	2.13	4.17
Chlorides of potash and sodium,	21.53	11.40
Potash,	6.89	2.04
Iodine,	0.48	0.01

The drift weed belongs to the *Laminaria*, of which there are two varieties, and the cut weed to the *Fucus*, of which there are three. The latter is considered the more valuable, perhaps from its containing a larger per cent of organic matter.

The population of Jersey, according to the last census, is a little over 65,000. The area of the island is as already stated, — 28,717 acres. Of this, only 19,514 are under cultivation, so that practically three persons are supported to each acre. It may not be uninteresting to note the acreage of the different crops, and compare it with the amount of produce exported. In 1891, the corn crops (wheat, barley, oats, rye, beans and peas) occupied 2,199 acres, wheat leading with 1,700; green crops, including potatoes, turnips, mangolds, cabbages and vetches, were 7,816, potatoes leading with 7,000; clover and grasses under rotation, 5,247; permanent pasture, 4,053; flax, 3; small fruits, 158; and uncropped arable land, 38. Horses numbered 2,360; cattle, 12,073; sheep, 305; and pigs, 7,618. In that same year there was exported into England alone, 2,300 cows and calves, or a little over one-sixth the entire number; 25 tons of butter; 1,863,165 bushels of potatoes, an average of 266 bushels to every acre under cultivation; 86,000 dozen eggs; 74,969 bushels of fruit and vegetables, to the value of \$400,000; the whole footing up to the snug little income of \$3,700,000, to be distributed among the 2,600 farmers owning or cultivating land. It is a noticeable fact that, while the cattle were valued at £40,000, the potatoes were placed at £447,134, or eleven times that sum. The figures above given are equally applicable to Guernsey, except that there a greater amount of fruit is grown, the yearly export of grapes footing up to over 500 tons. Tomatoes are raised in immense quantities for the London market, but no reliable statistics were available. As compared with our best varieties, they are very inferior in size and quality. The vines are trained up against the sides of the house, and continue bearing sometimes more than one year. The principal fruits are grapes, apples and pears. Jersey cider was at one time so celebrated that the agricultural society of the department of the lower Seine in

France sent over a commission to learn the methods of its manufacture; but the apple trees are now giving way to the potato, though still 30,000 to 40,000 bushels of the fruit are exported annually. Climate and soil seem especially adapted to the cultivation of pears, of which there are some fifty varieties grown, *bergamottes*, *doynes*, *beurrés*, etc. But the most remarkable are the chaumontel, whose fruit frequently reaches proportions that are truly wonderful. For fear you should think I am drawing on my imagination, permit me to quote from official records:—

“These pears are usually plucked about the 10th of October, but are not fit for use for several weeks, being in perfection about Christmas. Those weighing sixteen ounces are regarded as first rate, and fetch good prices. Pears of this size average in value twenty-five to thirty dollars per hundred in the island markets; but as they diminish in size and weight the value falls rapidly, the numerous small fruit being considered only fit for baking, although in point of flavor they are little inferior. The largest and best grown fruit on record was raised at Laporte in Guernsey in 1849. It measured six and one-half inches in length, fourteen and one-half in girth, and weighed thirty-eight ounces. As a group of pears from a single tree, there is perhaps no more remarkable instance recorded than one occurring in the season of 1861, when, of five fruit obtained from one tree in the garden of Mr. Marquand of Bailiff’s Cross, Guernsey, four of them weighed together seven and one-half pounds. It is worthy of remark that in this case the tree, though usually prolific, bore only these five fruit. The pears in question weighed respectively thirty-two and one-half, thirty-three, thirty-one and one-half and twenty-two ounces.”

Equally remarkable among the vegetables are the great cow cabbages. They reach a height of eight to ten feet. I myself measured one that was over eleven, and at the agricultural rooms at St. Helier there is preserved the record of one whose stalk measured sixteen. It takes a year for these plants to mature. They are set in November or December, about two feet apart, and grow all through the following season. The ground is hoed up against them when they have reached a certain height, having been previously

enriched with sea-weed. The leaves are stripped off as they become large, being used either for feeding cattle or packing butter, and the plants are left to spindle up with a small crown at the top. The stalks, which occasionally take on tree-like dimensions, are used as palisades for fences or poles for beans, but most frequently they are shellacked over or varnished and made into canes, selling readily to tourists at prices ranging from fifty cents to a couple of dollars.

From what has been said it will be readily conjectured that the potato is the chief crop. The greatest care is taken in the selection of seed, and they are handled as tenderly as the choicest fruit, each tuber being picked up separately and placed in an open crate, only one layer deep. In some sheltered spot or in a shed these crates are piled up one above the other till ready for use. When preparing for planting, these are placed in some warm corner and the potatoes allowed to sprout, selection being made of those shoots which have formed a healthy top and spring from a good eye. About twenty-two hundred-weight of seed per acre is used, being set about ten inches apart, and in rows some twenty-two or three inches wide. Cultivated in the open air, they are ready for market in April and May, but with the glass-house system now in vogue they are matured much earlier. Previous to the inroads of the potato disease, which greatly affected the crops, it was no uncommon thing to have a yield of twenty tons to the acre, and the average was fourteen; but it has now dropped to ten or eleven. So great is the demand for these potatoes that few are retained for home use, and large quantities are imported from France into Jersey for consumption; but, owing to the early crop being exported at a very high price, and the French potatoes purchased when the price is lowest, the balance of profit remains very largely in favor of the island.

Some idea of the fertility of the soil may be formed from the following figures: Hay averages three and one-half tons to the acre; a good return of one-year-old clover is over four tons, of two-year-old not more than three and one-quarter; wheat averages thirty-five bushels, though in some favored fields the yield has reached sixty; mangolds fifty tons, occasionally reaching seventy; parsnips twenty-five to thirty;

and carrots thirty. Wheat is sown in January, and that is followed by parsnips and potatoes; oats in February and mangolds in April. The rotation of crops is a five-year one, namely, turnips, potatoes, wheat, hay, hay. The grass is top-dressed in January or February with sea-weed, and that is followed later in the season by an application of liquid manure. Everything is turned to getting the most possible out of the land; and a recent writer, with just a touch of sarcasm, remarks: "Jersey still remains a land of open-field culture, and yet its inhabitants, who happily have not known the blessings of Roman law and landlordism, and still live under the common law of Normandy, obtain from their land twice as much as the best farmers of England. Besides their potatoes, they grow plenty of cereals and grass for cattle; they have more than one cow to each acre of meadows and fields under grass; they export every year, besides a large amount of dairy products, some 2,300 milch cows; and, on the whole, obtain agricultural produce to the amount of \$750 to each acre of the surface of the island."

So much has been said and written of late years respecting the cattle of Jersey that it would seem almost unnecessary to make mention of them. A few facts, however, in regard to their management and care, may not be uninteresting. In round numbers, twelve thousand are scattered over the island, but nowhere are large herds to be seen. Bunches of two or three, at most five or six, are found on the different farms, rarely more. This is easily accounted for by the small holdings of the farmers, the 19,000 acres of arable land being distributed among 2,600 owners. Of the entire number, according to the returns of 1891, 6,700 were cows and heifers in milk or in calf, 668 were two years and over, and 4,600 were under two years. Cows are considered in their prime at six and continue good until ten. After that they deteriorate rapidly. The first calf is usually dropped when the animal is two or under, and this has been offered as a reason for the small size of the breed. Cattle are allowed to remain out from May to October. After that they are housed at night, being driven in at four and let out at nine the following day. They are fed morning and evening, their ration being the same, three-fourths bushel of roots and a

little hay, and are milked three times a day during the summer. When out at pasture they are never allowed to roam, but are close tethered by a rope about four yards in length. Three times a day the stake to which the tether is attached is moved eighteen inches on a line parallel to the side of the field. In this manner the most economical use is made of the pasturage, and every blade of grass is cropped close. The whole care of the cattle devolves upon the women, who make great pets of them. As a result, they become singularly gentle and docile.

Since 1789, when a very stringent law was passed, the breed has been kept absolutely pure, a fine of one thousand dollars being imposed for every head of foreign cattle introduced, besides confiscation of cattle and boat, the cattle confiscated being killed on the spot, and the meat distributed or sold for the benefit of the poor of the parish where it shall be seized. In addition to the above heavy fine imposed on the captain, each sailor was liable to a fine of two hundred and fifty dollars, or in lieu thereof to six months' imprisonment. Up to 1833 no one had thought of improving the breed by any system or fixed rule, but on the formation of the Royal Jersey Agricultural Society, a scale of points for judging cattle was adopted, premiums were offered and the following regulations laid down: "Any person withholding from the public the service of a prize bull shall forfeit the premiums; and all heifers having had premiums adjudged them shall be kept on the island until they have dropped the first calf." These efforts and the increasing demand for the stock have led to the improvement of the breed in certain definite directions. The following scale of points has been adopted by the society:—

Ratio Scale of Points for Bulls.

Articles.	Points.
1. Registered pedigree,	5
2. Head fine and tapering, forehead broad,	5
3. Cheek small,	2
4. Throat clean,	4
5. Muzzle dark, encircled by light color, with nostrils high and open,	4
6. Horns small, not thick at the base, crumpled, yellow, tipped with black,	5

Articles.	Points.
7. Ears small and thin, and of a deep orange color within,	5
8. Eyes full and lively,	4
9. Neck arched, powerful, but not coarse and heavy,	5
10. Withers fine, shoulders flat and sloping, chest broad and deep,	4
11. Barrel hooped, broad, deep, and well ribbed up,	5
12. Back straight from the withers to the setting on of the tail,	5
13. Back broad across the loins,	3
14. Hips wide apart and fine in the bone,	3
15. Rump long, broad and level,	3
16. Tail fine, reaching the hocks, and hanging at right angles with the back,	3
17. Hide thin and mellow, covered with fine, soft hair,	4
18. Hide of a yellow color,	4
19. Legs short, straight and fine, with small hoofs,	4
20. Arms full and swelling above the knees,	3
21. Hind quarters from the hock to point of rump long, wide apart, and well filled up,	3
22. Hind legs squarely placed when viewed from behind, and not to cross or sweep in walking,	3
23. Nipples to be squarely placed and wide apart,	5
24. Growth,	4
25. General appearance,	5
Perfection,	100

No prize to be awarded to bulls having less than 80 points. Bulls having obtained 75 points shall be allowed to be branded.

Ratio Scale of Points for Cows and Heifers.

Articles.	Points.
1. Registered pedigree,	5
2. Head small, fine and tapering,	3
3. Cheek small, throat clean,	4
4. Muzzle dark, and encircled by a light color, with nostrils high and open,	4
5. Horns small, not thick at the base, crumpled, yellow, tipped with black,	5
6. Ears small and thin, and of a deep orange color within,	5
7. Eye full and placid,	3
8. Neck straight, fine, and lightly placed on the shoulders,	3
9. Withers fine, shoulders flat and sloping, chest broad and deep,	4
10. Barrel hooped, broad and deep, being well ribbed up,	5
11. Back straight from the withers to the setting on of the tail,	5
12. Back broad across the loins,	3
13. Hips wide apart and fine in the bone; rump long, broad and level,	5

Articles.	Points.
14. Tail fine, reaching the hocks, and hanging at right angles with the back,	3
15. Hide thin and mellow, covered with fine, soft hair,	4
16. Hide of a yellow color,	4
17. Legs short, straight and fine, with small hoofs,	3
18. Arms full and swelling above the knees,	3
19. Hind quarters from the hock to point of rump long, wide apart and well filled up,	3
20. Hind legs squarely placed when viewed from behind, and not to cross or sweep in walking,	3
21. Udder large, not fleshy, running well forward, in line with the belly, and well up behind,	5
22. Teats moderately large, yellow, of equal size, wide apart and squarely placed,	5
23. Milk veins about the udder and abdomen prominent,	4
24. Growth,	4
25. General appearance,	5
Perfection,	100

No prize shall be awarded to cows having less than 80 points.

No prize shall be awarded to heifers having less than 70 points.

Articles 21 and 23 shall be deducted from the number required for perfection in heifers, as their udder and milk veins cannot be fully developed.

We have thus far dealt only with open-air cultivation, but there is another phase, still more interesting, in which everything is grown under cover. Until the glass-houses of Jersey and Guernsey have been visited, no one can fairly appreciate the possibilities of intensive gardening. Originally erected for the purpose of growing grapes, they now combine that with the raising of all crops grown in the open air. These glass shelters are of the simplest construction, in most cases mere frames of glass and wood, sometimes heated, but oftener not. But they yield enormously, crop after crop, throughout the entire season. Hardly is one out of the way than another takes its place. Before the potatoes are out of the ground, beet or broccoli is set between the rows, etc. The whole island of Guernsey is dotted with them; here mere lean-tos against the sides of the buildings, there more substantial structures in the fields, or again rising tier upon tier up the steep hillsides. The grape crop, of which the annual exportation from the island of Guernsey

is over five hundred tons, valued at some two hundred thousand dollars, and on which the inhabitants chiefly relied for an income, has now become a side issue, and is entirely eclipsed by the immense quantities of potatoes, tomatoes, peas, beans and carrots raised under these shelters. It was not my good fortune to visit these glass-houses in the early season; but in November, on the island of Jersey, at Goose Green, in a house some nine hundred feet long by forty-one or two broad, I saw them ploughing down the centre while they gathered tomatoes from the vines on either hand, and picked the pendant bunches of grapes from the trellis work on the sides. No more interesting description of the vegetable houses has been written than that by Prince Kropotkin, and you will, I am sure, bear with me for a few moments if I quote from his recent article on the "Possibilities of Agriculture." "I saw three-fourths of an acre, covered with glass and heated for three months in the spring, yielding about eight tons of tomatoes and about two hundred pounds of beans as a first crop in April and May, to be followed by two crops more during the summer and autumn. Here one gardener was employed, with two assistants; a small amount of coke was consumed; and there was a gas engine for watering purposes, consuming one dollar's worth of gas every month. I saw again, in cool greenhouses, pea plants covering the walls for the length of a quarter of a mile, which already had yielded by the end of April thirty-two hundred pounds of exquisite peas, and were yet as full of pods as if not one had been taken away. I saw potatoes dug from the soil in April to the amount of five bushels to the twenty-one feet square, and so on. And yet, all that is eclipsed by the immense vineries of Mr. Bashford in Jersey. They cover thirteen acres, and from the outside these huge glass-houses and chimneys look like a factory. But when you enter one of the houses, nine hundred feet long and forty-six feet wide, and your eye scans that world of green embellished by the reddening grapes or tomatoes, you forget the ugliness of the outside view. As to the results, I cannot better characterize them than by quoting what Mr. W. Bear, the well-known writer upon English agriculture, wrote after a visit to the same establishment; namely, that the money returns from

these thirteen acres 'greatly exceed those of an ordinary English farm of thirteen hundred acres.' The last year's crops were twenty-five tons of grapes (which are cut from May till October, ranging in price at wholesale from one dollar a pound to eighteen cents), eighty tons of tomatoes, thirty tons of potatoes, six tons of peas, and two tons of beans, to say nothing of other subsidiary crops. On seeing such results one might imagine that all this must cost a formidable amount of money; but not so. The cost of Mr. Bashford's houses, most excellently well built, is only \$2.34 per square yard (heating pipes not taken into account); and all the work is done by thirty-six men only; three men to each acre of greenhouses seems to be a Guernsey average. As for fuel, the consumption amounts to no more than one thousand cart loads of coke and coal. Besides, one can see in the Channel Isles all possible gradations, from the well-constructed greenhouses just mentioned, to the simple shelters made out of thin planks and glass, without artificial heat, which cost only ten cents per square foot, and nevertheless allow of having the most surprising crops quite ready for sale by the end of April. Altogether, the glass-house is no more a luxury. It becomes *the* kitchen garden of the market gardener."

One of the most noticeable features of these islands is the appearance of thrift everywhere discernible. Everything speaks of ease and prosperity; paupers there are none. The poor are rarely seen. Roadside, garden and house alike betoken comfort and sufficiency. Not only are the outskirts of the town filled with substantial buildings, but the homes of the farmers are solid granite structures, it may be with cement floors instead of boards, the roofs thatched or tiled, showing red against the dark, rich background of foliage, but all comfortably, neatly furnished, the windows curtained with cambric or lace, while outside they are bowered in roses, jasmines or myrtles. There is a feeling of home, of ownership, of pride in possession that strikes one at once; and who that has once enjoyed the simple, hearty hospitality of those kindly people will ever forget it? The loaf of cake proffered by the good housewife with a half apology perhaps for it not being as light as it ought to be, the "Jersey

wonder" (a species of doughnut) melting away in the mouth before one fairly knows it is there, the pitcher of cider or bottle of wine, — everything is freely offered, and the guest made welcome to the best. The exquisite neatness which characterizes the house is just as plainly visible in its out-door surroundings. The well-kept walks, the neat, orderly barns and sheds, the gardens with their flowers and fruit, and, above all, the trim, cleanly roads, all bespeak the same care and thrift. Everything is turned to account; the droppings of the horses and cattle along the roads are carefully swept up and placed on the manure heap, the twigs broken by the gales are picked up and put away for fuel, and the leaves falling from the trees are gathered together and carried away to enrich the land. Nothing is lost, and the waste, except in questions of labor, is reduced to a minimum. But the tools are heavy and clumsy, and to this day most of the farmers work their ground with a plough that has a wooden mold-board with an iron point, the horses being hitched tandem.

The roads and lanes deserve special mention. The former are well built, and as a general thing follow the windings of the valleys, while branching from them in every direction are an infinity of lanes, so narrow that at intervals bays are constructed to allow teams to pass each other. No weeds along the margins are to be seen, for both road and lane are macadamized and bordered, sometimes by stone walls or well-trimmed hedges, but oftener by earth banks, upon or beside which are rows of trees. These high, earthen banks, taking the place of fences, with trees growing on top and covered all over with the greenest and most luxuriant of ivies, give to the lanes the appearance of trenches cut in the soil, and this effect is heightened by the arching of the trees overhead and the interlacing of their branches, which even in midday cast a shade that is almost twilight; and for miles you ride along through these leafy bowers, sheltered from the sun, protected from the wind, listening to the song of birds, till at last the vista opens, and suddenly you see the waves rolling madly in, and catch the thunders of the surf upon the granite cliffs.

The question is often asked, To what do the Channel

Islands owe their prosperity? Given an equable climate, a fertile but not rich soil, and a skilful husbandry, and you have the three prime requisites of success. That is true as far as it goes, but there is still a factor wanting to make the explanation complete. Other writers have placed it in the possession of a race of cattle popular throughout the world, a climate which is perfection, and a ready market almost at their very door. To these combined, I would add, "*A diffused property, a diffused capital and a diffused intelligence.*" The 19,000 acres of arable land of Jersey are divided among 2,600 farmers; only six have farms of one hundred acres; some fifty or more own twenty acres, but the great majority have small holdings from one-half acre to five or six. Land does not often change hands. If inherited, it cannot be devised by will, but must follow the line of succession, the law requiring that at death every child shall receive a part, the oldest son having the house in addition. The land laws thus discourage aggregation of property, and favor its distribution among the members of the family. Every man is at the same time a land owner, a capitalist and a laborer. To this "diffusion of property," and to the universal thrift and industry naturally following such diffusion, I attribute the general prosperity of the people. It is natural that a man owning his little piece of land will improve it to the utmost, and make it yield the largest income possible. The man occupying temporarily another's land will not lay out upon it any more than he can possibly help. There results, then, from these small holdings, an intense cultivation not possible on large estates.

How different the case in England may be seen from the following figures: of the 36,000,000 acres comprising England and Wales, 4,500 persons own 20,000,000; 288 hold over 5,000,000; 52 hold over 9,000 acres apiece; 204 hold over 5,000 and 2,432 hold over 1,000. More than one-half is owned by private individuals, holding 1,000 acres and upward. In Scotland this aggregation of land by the few is still more striking. Of its 19,000,000 acres, nine-tenths are held by less than 1,700 persons, and one-half of the whole of its area is held by 70 persons. The whole number of land owners is 131,530, but of these 111,658 own less than

an acre apiece. The largest estate is held by the Duke and Duchess of Sutherland, and amounts to 1,326,000 acres. With such a distribution of property, and with a poor law costing thirty-five million dollars annually, what outlook is there for the English farmer? What hope of ever acquiring possession of the little plot of land on which he works and spends his days, or what motive to induce him to improve property he cannot leave to his children? A recent writer puts it in a nutshell when he says: "In England the agricultural laborers, with the lands about them all taken up and so unsaleable, and with a poor law to provide for them under all the calamities of life, whether brought about by mishap or by their own wilful vice, have but little motive, even if they had the opportunity, for saving."





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