BIOGRAPHICAL MEMOIR OF THE LATE RIGHT HONOURABLE SIR JOHN SINCLAIR, BART., FOUNDER AND FIRST PRESIDENT OF THE BOARD OF AGRICULTURE, &c. &c. &c.

From the days of Cato the Censor, down to those of Curwen of Workington Hall, there is no greater name in the annals of Agriculture than that of Sir John Sinclair. This praise may at first appear startling, but the more the matter is examined, the less reason will appear for our language being considered that of exaggeration. Were it possible to throw ourselves back to the commencement of the last half century, and accurately to examine the situation of rural affairs at that period, and then to contrast the present with the past,—what we now behold around us, with the situation of our ancestors fifty years ago,—we would have not only ample cause for satisfaction, but for astonishment. What, within nearly the same epoch, medicine owed to Cullen, chemistry to Black, and steam to Watt, agriculture owes to Sir John Sinclair. To his active mind may be traced the germs of a thousand improvements, of which others claim the practical merit, and of which the world at large is at this moment reaping the advantage. What was a collection of mere isolated facts, he formed into the elements of a science. He classified and arranged; shewed what was still wanting, and suggested the most probable means of supplying the deficiency. From a chaos of jarring opinions he educed beauty, harmony, and order; and from the comparison of data, established a system of practical inferences. Nor was he a speculator at the expense of others. He commenced with his own estates. Where he failed he was the sufferer in his own property; but where he succeeded, the way to improvement and prosperity was immediately laid open to the public. Nor were his speculations confined to mere farming—to the art of extracting the greatest quantity of marketable produce, from a given extent of the earth's surface. His object embraced the general prosperity of the human race. He took into primary view the advantages and disadvantages of geographical situation; the healthiness and longevity of the inhabitants; the classes of the population; and the reciprocal influence of agriculture, manufactures, and trade

upon each other, both in relation to commercial prosperity, and to morals and religion. In the prosecution of this great and engrossing scheme for ameliorating the condition of humanity, no man of any age or country has devoted more labour, or that labour more successfully, than the late Sir John Sinclair. Nay, the word *Statistic*, a word now in every mouth, and which is pregnant with such a mass of implied information, had not even an existence in the English language, at the commencement of his career.*

The subject of the following biographical sketch was the representative of a principal branch of one of the oldest and most nobly descended families in the north of Scotland. The surname of Sinclair, or De Sancto Claro, is originally from France. Waldernes, Compte de Saint Clare, having married Helena, daughter of the Duke of Normandy, cousin-german of William the Conqueror, crossed over with that prince in 1066. His son William, a youth of distinguished merit, soon afterwards came to Scotland, and was well received by Malcolm Canmore. He became steward to Queen Margaret, and received, as a reward for his services, the lands and barony of Roslin, as well as several others in the Lothians. He was the founder and head of all the Scottish Sinclairs; and the Ulbster family is one of the oldest and most important branches from the parent stem. They trace back their descent to the ancient Earls of Caithness, and have possessed the lands of Ulbster for upwards of two centuries.

* "Many people were at first surprised," says Sir John, in his History of the Origin and Progress of the Statistical Account of Scotland, "at my using the new words, *Statistics* and *Statistical*, as it was supposed that some term in our own language might have expressed the same meaning. But in the course of a very extensive tour through the northern parts of Europe, which I happened to take in 1786, I found that in Germany they were engaged in a species of political enquiry, to which they had given the name of *Statistics*; and though I apply a different idea to that word, for by Statistical is meant, in Germany, an inquiry for the purpose of ascertaining the political strength of a country, or questions respecting *matters of state*; whereas the idea I annex to the term is an inquiry into the state of a country *for the purpose of ascertaining the* quantum *of happiness enjoyed by its inhabitants, and the means of its future improvement*; yet, as I thought that a new word might attract more public attention, I resolved on adopting it, and I hope that it is now completely naturalized and incorporated with our language."—*Statistical Account*, vol. xx. p. 13. 14.

Even before the Union with England, it was of such weight as to have more than once represented the county of Caithness in the Scottish Parliament.

George, the father of the distinguished subject of this memoir, was the son of John Sinclair of Ulbster, the heritable Sheriff of Caithness, a gentleman distinguished for his spirit and talents. He received the principal part of his education under the justly celebrated Dr Isaac Watts; and enlarged his understanding and knowledge of the world by foreign travel, in company with Lord Sandwich, afterwards First Lord of the Admiralty, Lord President Dundas, and other distinguished characters, whose friendship and regard he ever afterwards retained. Dr Blair, Dr Robertson, and many others of the celebrated literati of the last generation, were in the circle of his intimacy. On his return to his native country, he married Lady Janet Sutherland, the daughter of William Lord Strathnaven, by whom, besides several children who died young, he had two sons and three daughters. John succeeded him in the family estates; and James, who had entered the army, died in early manhood. Of his daughters, Helen was married to Colonel Campbell of Barcaldine, in Argyleshire; Mary to James Home Rigg of Morton; and Janet to Lord Polkemmet, one of the Senators of the College of Justice.

Having died at Edinburgh on the 31st August 1770, he was succeeded by his son John, who was born at Thurso Castle, in the county of Caithness, May 10. 1754, and who was of course in his seventeenth year when he succeeded to the family property. The estate, during his minority, was taken charge of by his mother, Lady Janet Sutherland, as was also the superintendence of his education.*

* How estimable a parent Sir John Sinclair lost in the death of this lady, may be seen from the following letter, containing her last injunctions for his future conduct in life:

"My Dear Son, "Thurso East, *9th June* 1783.

"Before this can be delivered to you, I shall have bid a final adieu to this vain world,—to all its concerns,—and all my connexions in it. The death of an affectionate parent will naturally affect a son of your sensibility. I earnestly pray Almighty God to grant his choicest blessings on you, my dear son, your amiable wife, and promising children. May you always endeavour to serve God faithfully, and to worship him with reverence. May religion

Sir John Sinclair received the elements of his classical knowledge at the High School of Edinburgh; and he was also fortunate in receiving private tuition from the amiable and accomplished John Logan, who had been recommended to the family by his friend and patron Dr Blair. At a mature age he pursued consecutively his studies at the Universities of Edinburgh, Glasgow, and Oxford. It may easily be supposed that the varied modes of conveying instruction at these distinguished seminaries did not pass unnoticed by his observant mind; and that it suffered nothing, but gained much, from this diversified education. A more extensive acquaintance with the academical world was thus opened up to him; and he had an opportunity

and virtue be the rule of all your actions; and suffer not the temptations or allurements of a vain world to make you swerve from your duty.

"My settlement, of date 1776, which will accompany this, will give a striking proof of my attachment to you and yours. May the blessing of God accompany it. Your sisters I recommend to your affectionate attention. I hope they will merit it. Mrs Campbell has a large family, which she will find it difficult to educate and to provide for. Mrs Rigg is happily married to a good husband, and is in great affluence. My dear Jessy is happy under your and Mrs Sinclair's protection. I hope you'll be a father to them all.

"As to your own concerns, I entreat you to observe economy, and beware of impositions. Reside as much in Caithness as possible, and do not trust too much to the management of others in the conducting of your affairs. You'll find few to trust. Self-interest with some, popularity with others, you'll have to encounter. Even my long experience was not proof against their arts. Keep short accounts with those you employ in every capacity; and do as much of your own business and affairs as possible yourself.

"I don't approve of setting large tack (or farms) to tacksmen. They often oppress the poor people under them.

"To be in debt is a most disagreeable situation to be placed in. To contract it is easy, but how very difficult to repay. It lessens one's importance, chagrins the temper, and ruins a family. Beware of cautionry, and engagements for others.

"I have had a variety of trials and afflictions in life, with malice unprovoked,—*disrespect* and *indifference*. These I did not merit or resent, and I now *forgive*.

"Adieu, my dearest son, till we meet in another world; as I trust, in the mercy of God, and through the merits of an all-sufficient Saviour, that we shall meet in a state of bliss, and endless happiness, where the wicked cease from troubling, and where the weary are at rest.

"May you and yours be happy. God bless all my dear children, prays

Your affectionate mother,

"JANET SINCLAIR."

of balancing, in his own judgment, the merits of the particular systems then in vogue among the learned.

So early as his fifteenth year he had shewn a decided turn for literary composition, and before he was sixteen had begun sending his effusions to the periodicals of the day. Some of these boyish productions have been preserved, and do no discredit to the future man.*

On his return to his native country from Oxford, he applied himself to the study of law, not with the view of following it out as a profession, but to gain an acquaintance with the national institutions. In 1775 he became a member of the Faculty of Advocates, and was afterwards called to the English bar. The circle of his acquaintance was thus greatly extended, although we do not find, except in a few instances, that reciprocity of taste and talent continued to bind him, in after life, to the companions of his legal studies.

In the same year he made an excursion into France with his brother, Lieutenant James Sinclair, to whom he was most affectionately attached, and who was at that time in bad health. After visiting Paris, the brothers proceeded to Dijon, and thence by Avignon to Aix en Provence. The season, however, instead of being a warm one, was found by the travellers to be so inclement, that the object of their journey was in a great measure frustrated, and their sojourn at Aix was of short duration.

In 1780, Sir John, then Mr Sinclair, was elected Member of Parliament for the county of Caithness, where his estates are situated; and he had also the same honour conferred on him at the elections in 1790, 1802, and 1807; but as the county of Caithness was only alternately represented in the British Parliament, he was, during the intervals, chosen for the boroughs of Lestwithiel in Cornwall, and Petersfield in Hampshire. He thus continued, with the intervention of a very short interval, a member of the House of Commons, till July 1811, being a space of more than thirty years.

His attendance on his parliamentary duties was most assiduous and exemplary; and, in 1782, he published a tract, entitled, "Lucubrations during a short Recess; with some Thoughts on

* In Appendix A. to vol. xx. of the Statistical Account of Scotland.

the Means of Improving the Representation of the People." From the attention it excited in the political circles, it called forth an answer from Lord Camelford, as well as from others, and must have been, in every respect, highly flattering to the feelings of the young author.* This he followed up by another, in the same year, under the title of "Thoughts on the Naval Strength of the British Empire, in answer to the late Lord Mulgrave, one of the Lords of the Admiralty." In this pamphlet the author explains the reasons, according to his own judgment, for the superiority of the British over the French navy. At this time the naval character of the country had been greatly depreciated; and it was said to have been maintained, even by Lord Mulgrave himself, that if a continental peace enabled France and Spain to concentrate their powers, they would prove more than a match for Great Britain on the ocean. After pressing on the attention of the Ministry the propriety of establishing a militia force, he published his "Considerations on Militias and Standing Armies;" and the suggestions which he threw out on that occasion were afterwards adopted in practice. His only other connexion with the press about this period, was in the publication of an anonymous tract, "The Propriety of Retaining Gibraltar, impartially considered." It was supposed by many at the time to have been the production of the first Lord Camelford.

Sir John Sinclair has been often heard to declare, that no circumstance connected with his Parliamentary career ever afforded him more entire and unalloyed mental satisfaction, than the success of a measure which he, about this time, suggested to the House of Commons, for alleviating the distress and wretchedness caused in the north of Scotland by a failure of the crops. Accounts from above a hundred parishes bear witness of the miserable state to which they were reduced. The cold and stormy summer of 1782 so fatally retarded the ripening of grain, that, in October, the oats and barley were still green. At the commencement of that month frost set in with the severity of an

* The first publication of Sir John, which we have been able to ferret out, was an 8vo volume, printed at Edinburgh in an earlier part of the same year, and entitled, "Observations on the Scottish Dialect." Never having chanced to meet with it, we can of course say nothing of its plan or execution.

Arctic winter; and, in a single night, laid the hopes of whole districts desolate. The frost-bitten grain became white, and the progress of ripening was at an end :—the garden produce, from want of sun, was destitute of its wonted nourishment; the turnip and potato crops were dwarfed and destroyed; the markets were nearly unsupplied, and what was brought for sale was of the worst quality. In some parishes the oats were cut out from amidst the ice and snow in the middle of November; and, in that of Mar and Dalarossie, they continued buried up till the February of the following year.

The oatmeal produced from this blasted and unripened harvest was dark in colour, and of an acid, disagreeable flavour—at once innutritious and high-priced. Many were compelled to kill their cattle, and eat their flesh without bread. The poor along the sea-coasts subsisted chiefly on whelks, limpets, cockles and other shell-fish. Numbers lived on nettles, of which they made a kind of coarse soup, and even snails were salted for winter provision.

This nearly utter deprivation of the meanest necessaries of life extended over several counties, and included a population of more than a hundred and ten thousand souls; and, indeed, the narrative of their sufferings, and of the shifts to which they were reduced to preserve mere existence, was liker those related of the shipwrecked on a desert coast, or of the generous enthusiasts of a polar overland expedition, than of a Christian community in a civilized land, and at their own firesides. By the force of his appeals, and his unwearied exertions in the cause of his suffering fellow-creatures, Mr Sinclair succeeded in getting the subject referred to a committee of the House. Although no precedent could be produced from the National Journals of any grant for a similar purpose, yet, in such a touching light had the case been set before them, that they voted an Address to the Crown, assuring his Majesty, that the House would make good whatever expenses might be incurred in the endeavour immediately to mitigate the horrors of such an appalling calamity. Nor could any thing be more gratifying than the result of this generous donation. The grant, so opportunely made in providing food for the hungry, was also, in a great measure, the means

of removing the almost pestilential degree of sickness caused mainly by cold and deficiency of nutriment.*

It should have been mentioned that, in 1776, Mr Sinclair married Sarah, only daughter and heiress of Alexander Maitland, Esq. of Stoke Newington, in the county of Middlesex, a near relation of the Earls of Lauderdale, by whom he had two daughters, Hannah, since dead, who wrote the celebrated letters "On the Principles of the Christian Faith," and Janet, the wife of Sir James Colquhoun of Luss, Bart.

Towards the close of the American war, when the national prospects looked altogether lowering and gloomy, when the loyal were disheartened at the success of rebellion against the mother country, and when a spirit of disaffection and distrust hovered over the mass of the people, Lord Stair, Dr Price, and a number of other distinguished political partizans, added to this gloom, and fomented this discord, by maintaining that the finances of the country were irretrievably ruined, and that national bankruptcy must immediately ensue. To dissipate the cloud which had thus spread itself over the public mind, Mr Sinclair published, in 1783, his "Hints on the State of our Finances." In this pamphlet he triumphantly refuted the doctrines which had been so perniciously inculcated on the subject; and the excellent effects of his exposition were felt no less abroad than in Great Britain. So struck was Sir Joseph Yorke, then our ambassador in Holland, and afterwards Lord Dover, with the spirit and ability displayed in this essay, and of the sanatory change which it produced in the national mind, that he is said to have declared that "it ought to be printed in letters of gold."

From this publication, the authority of Mr Sinclair as a financier took its rise, and its popularity and success gave his

* "Nor was it alone in the northern parts of Scotland, where this calamity was experienced. Even in Lauder, in Berwickshire, it was the end of December before the harvest was finished, after the greater part of the crop was destroyed by frost and snow. In the parish of Holywood, in Dumfriesshire, there was a heavy fall of snow on the 2d of November 1782, which covered the corn so deep, and lay so long, that it could not be cut for several days afterwards. Even in Ayrshire, the snow fell before the corns were cut down; the greatest part were in the fields, and much destroyed by frost."

Vide Analysis of the Statistical Account of Scotland, Appendix No. 3. to chapter iii. p. 41.

opinion great weight with the monied interest of the country. The author was then residing at Brighton; and he was there waited on by Sir James Eisdale, then an eminent banker in London, for the purpose of his being consulted regarding the extension of the banking system in England, where it was then scarcely known. The plan, which Sir James submitted to him, was such as highly met his approval, and Mr Sinclair was the more able to speak of the advantages of it, from his knowledge of the benefit derived to the country from the Scottish Banks. Thus countenanced in his schemes, Sir James was immediately induced to put them into practice; and, before his return to the metropolis, he made the circuit of several of the English counties, where he established about twenty branch banks, in connection with his London house. Hence sprung the extension of the English banking system, and how much of its prosperity and power can be traced to this circumstance, need not be told to those versant with the trade and manufactures of the nation. But it seems necessary that time should be allowed to sanction improvements however palpable, before their beneficial operation is generally admitted; and hence, unfortunately, Mr Pitt could not be induced, notwithstanding the urgent application of Mr Sinclair, to require such bankers as issued notes to give security for them. The overlooking of this necessary check was the cause of much distress; inasmuch as needy adventurers circulated notes without the means of paying them, and in their insolvencies involved many, who had incautiously put faith in the stability of their credit.

In 1784 he applied to Mr Pitt for the grant of a baronetage, to which he had a claim, as heir and representative of Sir George Sinclair of Clyth; and, in 1786, this claim was acceded to, in his being created a Baronet of Great Britain, with remainders to the heirs-male of his daughters by his first wife,—a destination of which there is scarcely another example on record.

In this first section of his parliamentary career, Mr Sinclair came in contact with, and secured the friendship and correspondence of Lord North, afterwards Earl of Guilford, at that time Prime Minister; of the Earl of Sandwich, First Lord of the Admiralty; of Lord Viscount Stormont, Secretary of State for

the Foreign Department, nephew to the justly celebrated Lord Mansfield; and the Right Hon. William Pitt.* In the great contest which took place between that distinguished and pre-eminent statesman, and his rival Mr Fox, in 1784, Mr Sinclair strained every nerve in his support, and so influentially, as to receive letters of thanks both from himself and from his confidential friend the Marquis of Abercorn.

In the year 1785 Mr Sinclair engaged seriously in inquiries on political subjects in general, and collected a great mass of materials from different sources. The first published form which part of these assumed, was in an essay "*On the* Public Revenue of the British Empire." In *it he* concentrated the essence of a vast variety of publications on the subject, and offered many luminous suggestions of his own. The work was subdivided into three parts, two of which at this time appeared, and the third in 1790. As, in the subsequent editions of this work, it assumed almost a new form, we must content ourselves with simply mentioning *it at this period of his* labours.

In the same year, Mr Sinclair suffered a sad domestic bereavement in the death of his wife. Indeed, so deeply was he affected, that he had almost resolved on retiring from public life, and resigning his seat for Lestwithiel, which had been procured for him through the medium of Mr Pitt. To soothe his mind, and alleviate the pressure of this deep affliction, he was induced to make a short excursion to Paris during the Christmas recess; and being there known, not only as a member of the British House of Commons, but as an author on financial and other political subjects, his reception in the French capital, at that period a place of great interest, was in the highest degree gratifying to his feelings. He breakfasted with the literary circles, dined with the political, and supped with the fashionable. He also directed a great part of his attention at this time to the commerce and manufactures of France. During this visit to the French capital, he acquired the personal friendship of the immortal Buffon, of Necker, of his daughter, afterwards the celebrated Madame de Stael-Holstein, of Madame de Genlis, and of others whose names are familiar to the voice of fame. By a happy chance, his fellow-travellers from London were Joseph Mont-

* *Vide* Correspondence, vol. i. p. 64-92.

golfier, the distinguished chemist, arithmetician, and aeronaut;* Argand, so well known for his improvements in the construction of lamps; and Reveillon, the great paper-manufacturer, whose premises Mr Sinclair found one of the most interesting objects in Paris. While there, he was enabled to make observations on several subjects of national moment. The improved machines for coinage, invented by Monsieur Droz of Switzerland, were at that time unknown in England; and having prevailed on that gentleman to explain his plans to Mr Bolton of Birmingham, he was thus the means of introducing this superior mode of coinage into the British mint. At the same time, he brought over the knowledge of a discovery still more valuable. Having gained the acquaintance of Monsieur Clouet, director of the national establishment for making gunpowder, he had some very important improvements in the manufacture of that article explained to him. These, on his return, he communicated to the English Government; and the Board of Ordnance were thus enabled not only to make a considerable saving in expense, but to provide an article very superior.†

* Montgolfier informed Sir John that he and his brother were paper manufacturers in Languedoc, but had always felt a strong attachment to chemical and mathematical inquiries. They were thence led to procure all the information they could regarding those subjects. Montgolfier then stated, that he and his brother had talked over the possibility of ascending themselves, or of sending up large bodies from the earth, at a very early period, without however, having ever made any experiment to prove whether the idea was practical or not; but that having accidentally read an account of some experiments made by Dr Black, which explained the nature of the various kinds of airs or gases, and, in particular, their difference in point of weight, he immediately said to his brother, "The possibility of effecting what we talked of some time ago, seems to be proved by this great chemist: Let us try some experiments to ascertain its practicability." The progress of the discovery afterwards is well known. It is doubtful whether the attempt would ever have been made, had not the brothers been paper manufacturers as well as chemists; but the point which should be publicly made known is this, that had it not been for Dr Black's discoveries, no experiment would probably have been tried by the two Montgolfiers. This Sir John had on the evidence of the elder Montgolfier, who always mentioned Dr Black with that respect to which he was so peculiarly well entitled.

† It is rather a remarkable circumstance, that Dr Watson, the celebrated Bishop of Llandaff, claims the merit of proposing to Government that the wood employed in making gunpowder should be distilled in cylinders, which, he avers, produced a saving to the country of a hundred thousand pounds per

In 1786, Mr Sinclair resolved on making an extensive tour through the northern countries of Europe, with a view of contemplating their political and commercial phases. In the course of this journey, he travelled above 7500 miles, and made many valuable observations on the political, commercial, agricultural, moral and religious state of the Netherlands, Holland, Denmark, Sweden, Russia, Poland, Austria, and Prussia. He had personal interviews with the Emperor Joseph, the Empress Catharine, the Grand Duke of Russia, afterwards the unfortunate Emperor Paul, Stanislaus of Poland, Frederick William the Second of Prussia, Gustavus the Third of Sweden, Frederick the Sixth of Denmark, the Prince of Orange and Holland, and the celebrated Prince Ferdinand of Brunswick, the hero of Minden. It was not till the year 1830, when Sir John published two large volumes of his correspondence, that a digest of the remarks made during these travels was submitted to the public. They are in many respects both valuable and interesting, not only as relating to the period when they were made, but as affording grounds for contrast with the moral and political aspect of those dominions at the present day. Many graphic illustrations of personal character are preserved; and we have glimpses, as it were, into the private life of many whose names are blazoned on the rolls of historic renown. On his return, he established a correspondence with Count Hertzberg of Pomerania, minister to the King of Prussia, and author of several valuable works on agricultural subjects; Count Bernstoff, prime minister to the King of Denmark, whose son, the young Count, was induced to make a visit to Britain in 1800, principally with a view of acquiring

annum. That this discovery appertains to France, and was brought over to England in the manner mentioned, there can be no doubt. Indeed we have seen the memoranda of Sir John, in which he takes notice of his having confidentially mentioned the circumstance to the Bishop; and of his having arranged a meeting between the Duke of Richmond, then Master-General of the Ordnance, and the Doctor, who was personally unacquainted with his Grace.

Dr Watson has sadly misconstrued the circumstances of this visit, if, as implied in his Anecdotes of his own life (vide, p. 149), he supposed it an application made by Government to him for his advice, as to improving the strength of gunpowder.

That the merit of introducing the Continental improvement into Great Britain appertains to Sir John Sinclair, is as certain, as that Sir John did not write the Bishop's justly celebrated "Apology for the Bible."

agricultural knowledge, that he might be the more able to encourage, judiciously, the arts of husbandry in his own country; Count Marcoff, the ambassador from Petersburg at the Swedish court; as well as with many other distinguished political and literary characters on the Continent. Sir John was thus the fortunate means of opening up a good understanding between men, who had formerly stood aloof from each other from want of some common bond of union: and, from the communication of knowledge and sentiment which subsequent epistolary correspondence disclosed, many facilities were given to the furtherance of the arts of peace, and the general welfare of the human race. The foundation of many agricultural societies throughout Europe may be traced to the ramifications of the spirit which here began to unfold itself; and, without its fostering influence, many institutions at this moment flourishing, and doing practical service to humanity, would never have been dreamt of, or, if tried, would have perished for lack of countenance and support. The observations which Sir John was also able to make on commercial subjects at this time are also particularly worthy of attention, from his having grounds for drawing general deductions, by a comparison of the effects, in different kingdoms, of monopolies, prohibitions, and exorbitant duties; as also on the varieties of the moral constitution of man, attributable to national governments, and efficient or defective systems of education.

While in Germany Sir John more particularly directed his attention to the flourishing manufactures of that country, and carried away with him a variety of hints, which were afterwards put to practical purpose at home, by being communicated by him to those most likely to profit by them. Among others, Mr Wedgwood, to whom the earthenware manufacture of this country owes so much, was so gratified with the information regarding the making of china, which was thus obtained for him, that he presented in return to Sir John a dessert set of his finest ware.

On his return to his native country in 1787, Sir John commenced those improvements on his own estates, which have tended in a great measure to give a new physiognomy to the shire of Caithness. In a paper, drawn up by himself at a subsequent period, he well remarks, "That it is a peculiar disad-

vantage attending the cultivation and improvement of a remote and neglected district of a country, that every thing is to be done, and that a great variety of new and important objects must be attended to at one and the same time. Those who live in a part of the island, that has already made considerable progress, can hardly form an idea of the difficulties which must be surmounted, when towns and villages must be erected, as centres of communication and business; when roads and harbours must be made, for the sake of domestic and of foreign intercourse; when manufactures must be established, to provide employment for the surplus population, which an improved system of agriculture, and the enlargement of farms, necessarily occasion; and when new breeds of animals, new instruments of husbandry, and persons skilled in new modes of cultivation, must be introduced from distant parts of the kingdom. If it is possible, however, by the application of a great capital, and of great attention, successfully to carry on these objects together, the one has a tendency to promote and to encourage the other; the spirit that is excited for the improvement of one article rouses a similar spirit of energy in regard to another; and a new race of people is in a manner formed, who, from a state of torpor, ignorance, idleness, and its concomitant poverty, are animated to inquiry, roused to exertion, and impelled to obtain by their industry the acquisition of wealth." *

Nothing can be conceived more unpropitious in an improveable light, than the estate, as it originally passed into the hands of Sir John Sinclair. It was situated in five parishes, Thurso, Halkirk, Reay, Wick, and Latheron; comprehended 100,000 acres, or more than a quarter of the whole surface of the county of Caithness; and was estimated at nearly a fourth of the whole rental. Excepting a few large farms, or what are called *Mains*, it was at that time occupied by a number of small farmers, to the number of eight or nine hundred, holding their possessions in what are called *rig and rennel*, or intermixed with each other; and, beyond the outer fence of this motley farm, were nothing but wide uninclosed commons, free to all the neighbouring proprietors. A moiety of rent was paid in money; but by far the

* See Sketch of the Improvements carrying on by Sir John Sinclair, Bart. printed anno 1803.

larger portion of it in grain, lamb, poultry, and other articles of produce.

Sir John found it, in the first place, necessary to establish some large farms, with a view of inducing persons of a competent property, to direct their attention to agricultural pursuits, as a suitable means of employing capital. As an incentive to others, he took into his own hands the farm of Stonefield, originally possessed by eight of the small tenantry; yet, deeming that a mixture of small farms is advantageous in a thinly peopled country, he encouraged them to settle in towns or villages, or in what have been since termed cottage farms. Having brought it into a proper state of cultivation, he let it at a very moderate rent, so as to induce the tenant to build a suitable house, and complete the improvements which had been commenced. To insure this, certain stipulations were entered into, by which the tenant was obliged to go on liming and marling to a certain extent every season; as, without this agreement, it was quite evident that the improvements would neither have gone on in the same degree, nor with the same rapidity.

To give the new system a fair trial, regular plans were drawn up of the different farms, by which it was ascertained how they could best be distinctly divided, and in what situations the houses and offices should be built. Services of every kind were abolished, as also *thirlage*, or restriction to particular mills. The miller was made a separate profession, whose care it was to bring the corn to the mill, and to carry it to market. The tenants were tied down to a regular rotation of crops, until the advantages of an improved system of husbandry should be made apparent to them; and every assistance was given them in procuring proper seeds, especially clover, rye-grass, and turnip. The selling of peat was prohibited, as an obstacle in the way of the tenants for collecting manure for their farms; and the burning of coals for fuel was recommended, principally with the view of keeping their whole attention directed to their farm management. Every facility was at the same time given them of purchasing marl; and lime was delivered to them at Thurso, at the lowest price at which it could be imported. Small premiums were also distributed, as an encouragement to industry. Many judicious hints were also at the same time distributed among the farmers.

They were recommended in the taking of land to have sufficient capital at starting, and never to depend on credit; to study their profession carefully before commencing it on their own account, and rather to cultivate fifty acres well, than a hundred in a slovenly manner; to endeavour to raise the best grain, to keep the best stock, and to cultivate the ground at the least possible expense.*

By following out this system of improvement, in a short time 2181 Scotch, or 2617 English acres, were brought under its operation;—1046 as pasture, and 1135 as arable land; the farmers themselves confessing, that they had themselves been amply remunerated, wherever they had rigorously followed out the chart prescribed for them.

A plan was also laid down for *letting* the hill farms on Skinnet and Leurary. It was suggested that they should consist, as nearly as possible, of twenty-five acres each, with an acre for house, garden, and offices, while the remaining twenty-four should be subdivided into fields, each of four acres, calculated for a rotation of six years. The leases were to be for twenty-one years, and from one to five shillings an acre as rent for the first seven years, with a gradual increase during the remainder of the lease. On entering upon his lease, each tenant, on finding security for his laying out the same properly, was to get a sum of money to assist in building operations, and, at its expiry, a certain additional sum was to be allowed him, according to the value of the premises erected. The position of the house and garden was to be under the direction of the proprietor.

It was stipulated that twelve acres should be put into a state of cultivation within the three first years, and four acres every year after, until the whole were brought under the plough. The subdivision of this part of the arrangement was, that, after the first seven years, the tenant should have eight acres in corn, eight in pasture, four in green crops, and four in sown grass, either cut green, or made into hay, and the rotation was to be thus—1. Fallow or green crops; 2. grain, with grass seeds; 3. grass, either made into hay or cut green; 4. pasture; 5. ditto;

* Vide Appendix to Henderson's General View of the County of Caithness, p. 42-46.

and, 6. oats; and so on till the expiry of the lease. The tenants were also to be allowed at entry a sum of money for inclosing, on finding security for executing the same, according to a plan laid down; and sheep, being so destructive to hedging, planting, and similar improvements, it was stipulated, that none should be kept without the express leave of the proprietor.

In a short time no less than fifty farms on this plan were laid down, in addition to the tract bordering on the old arable fields. Great exertions were made to bring this extensive tract into cultivation, and, even within the first year, considerable progress was made. The greatest difficulty the settlers experienced consisted in the provision of hay and straw for their cattle and horses, until they could raise those necessaries themselves. In cultivating extensive wastes, it is for this reason necessary that there should be some arable land in the vicinity; and, from this circumstance not being sufficiently attended to, many attempts at improvement have been entirely frustrated, which might otherwise have proved successful.

The improvements in the parish of Wick and the lower part of the parish of Latheron were, at the same time, carried on with great energy and success by Captain Brodie of Hopeville. Houses were built, mosses drained, villages planned, wastes inclosed, harbours cleared, and roads made. On the grounds of Wester Clyth and Roster, great attention was also paid to the fisheries by Dr Henderson. Where only one boat had been employed in the herring-fishery, he, in a short time, increased the number to thirty, exclusive of a number of small ones; and the produce of one year was three thousand barrels of herrings.

The improvements on the estate of Langwell were on a still more extensive plan, and were carried into effect with even still greater success. Besides the inclosure of arable and the improvement of waste lands, it was resolved to raise the value of that extensive property principally by converting it from cattle into sheep farms. The great difficulty at the outset arose from the estate being occupied by not less than eighty small tenants, whose united rental did not exceed two hundred and fifty pounds per annum. Nothing was bred but a few cattle, and nothing fed but some wandering red-deer, on the upper part of

the property. Humanity, however, required that five hundred offenceless individuals should be provided for; and this was done by adopting the plan of cottage farms, each consisting of two acres of arable land. In reference to this property, Sir John Sinclair has well remarked, that "of all the means of bringing a mountainous district to a profitable state, none is so peculiarly well calculated for that purpose as the rearing of a valuable breed of sheep. A small proportion alone of such a description of country can be fit for grain, and, in regard to cattle, for every pound of beef that can be produced in a hilly district, three pounds of mutton can be obtained, and there is the wool into the bargain. Besides, wool is an article easily transported, of essential use, for which there is in general a *regular* demand, and which is capable of great improvement. Sheep, also, generally sell with less variation of price than cattle, and are easily driven to market."*

In a pecuniary point of view, the advantages which resulted from these improvements on the estate of Langwell were very great, and within a few years raised the rental from under three hundred to above sixteen hundred pounds per annum; and, in a moral point of view, were of incalculable benefit to the natives of the district. A spirit of industry and emulation was introduced, and the women had spinning-wheels distributed among them by wheel-wrights, who were set up there for that purpose. Nothing, at first sight, could be more forbidding, more complicated, and operose, than this system; and yet, by perseverance, it was made to answer beyond the most sanguine expectations. A rude was converted into a civilised district, and the country was improved without being depopulated.

In connection with the estate of Langwell, it should be mentioned, that at the time when Sir John purchased it, he had commenced his plans for the improvement of British wool; and it occurred to him as a most proper place, to ascertain whether a certain breed of mountain sheep, to which had been given the name of *Cheviot*, would thrive in those more northern districts. Alike in Northumberland and in Caithness the idea was scouted as visionary. Among the northern mountains sheep had never

* Vide Appendix to Henderson's General View of the Agriculture of Caithness p. 58.

been kept during winter, except in houses; and it was thought impossible to make them brave the boreal storms. Sir John, however, was determined not to abandon the attempt without trial; and knowing that, if he made it on a small scale, and trusted the sheep to the care of native shepherds, they would be allowed to perish, he sent north a flock of five hundred at once, accompanied by the most experienced shepherds. The succeeding winter happened to be a stormy one, with great falls of snow; yet the flocks prospered, and few suffered either from disease or want. The principal loss arose from the attacks of foxes in spring on the young lambs; and it required great vigilance to keep that nuisance under. In a short time it was found, that instead of perishing, the Cheviot sheep throve fully better in Caithness than even on their native hills, and their numbers had increased to six thousand.

When Sir John purchased the estate of Langwell, the rental was only L. 282, and he bought it for L. 8000; but so much had he increased its value by improvements of every kind, that when he was subsequently induced to sell it, it brought him the sum of L. 40,000,—an increase quite unprecedented in the annals of buying and selling.

Having thus described, in a general way, the plan of agricultural improvement introduced by Sir John Sinclair into Caithness, both as adapted to the valley and mountain districts, we cannot do more than merely allude to the concomitant improvements accomplished, in the way of forming roads, raising plantations, working mines, establishing inns for the accommodation of travellers, constructing harbours, and opening up new channels for the extension of commerce and manufactures.

Great difficulties were at first experienced in improving the roads in the county of Caithness, the soil being either of clay or peat, and the materials for making or mending them of a softish quality. Sir John, however, got Government interested in the undertaking, and perhaps the greatest exertion ever made in road-making in Scotland was when he had 1270 men employed at one time, along the side of the hill of Bennichiel, and laid down six miles in one day. Nor was the situation of Caithness more favourably adapted for the growth of plantations, being a promontory, two-thirds of which are surrounded by the sea,

whose spray is so injurious to the growth of trees. Add to this, that the soil of a great part of it lies on a flat rock, preventing the roots from penetrating to a proper depth. Attempts were however made, with considerable success in many places that seemed of little promise; and, in the parts adjoining Sutherland, on the eastern coast, not less than 320,000 Scotch firs, besides 22,000 larches, ashs, mountain ashs, elms, and sycamores, were thriving in situations which at one time appeared destined to perpetual sterility and bleakness.

In the fisheries a new source of wealth and industry was opened up to the inhabitants; and they, to this moment, continue, as all know, in a most thriving state. Indeed, no district *in* the British dominions is better calculated for that *branch* of commerce, there being above forty different *varieties* of fish, either in the fresh waters of the *county* or in the adjacent seas. The greater part of the cod with which the London market is supplied, is taken almost within sight of the town of Thurso, and the fishing-smacks employed for the purpose rendezvous at Scrabster Road, in its immediate neighbourhood. The most important branch of the fishery, however, is that *of herrings*, which are cured for home or foreign consumption. Sir John Sinclair early foresaw the extent to which these fisheries might and would be carried; as also their vital importance to the prosperity of Caithness. So early as 1787, he induced the Messrs Fall of Dunbar to re-establish the cod-fishery, which had been nearly abandoned for many years; and he furnished capital to John Sutherland of Wester, and to John Anderson of Wick, to enable them to commence a herring-fishery on the east coast, which ultimately proved so successful as to have yielded, in one year, above 200,000 barrels.

Sir John also procured public aid for increasing harbour accommodation; and, at the expense of L.12,000, that of Wick was completed. An act was also obtained for constructing the harbour of Thurso, which if completed would prove so beneficial to the neighbourhood. From the sale of the surplus produce of the farmer, an incitement was given to commerce; and while he was accumulating capital wherewith to improve his stock, the quality of his grain, and his implements of husbandry, as well as increase his domestic comforts, his intercourse with the trader

tended to mutual prosperity and enlightenment. The commerce, which had hitherto been insignificant, and consisted chiefly of grain, cattle, and fish, rapidly increased; and a trade has been opened up, not only with the Baltic, but with the West India Islands. Tanneries have been erected, bleachfields laid down, and woollen manufactories established.

Impressed with the idea, that wherever a number of inhabitants are collected together, they furnish a market for agricultural produce, which of course increases with the demand, Sir John used every exertion to enlarge the town of Thurso, at that time containing sixteen hundred inhabitants. It was, however, very irregularly built, and in some parts so crowded as to be prejudicial to the health of the people. He therefore resolved on laying down the plan of a New Town, to be built regularly, and in which he consulted both beauty and convenience. How well this has succeeded the reader need scarcely be reminded. Its situation for commerce is admirable, being within a few hours sail of the German and Atlantic Oceans; and nothing can surpass its convenience for fisheries, that great source of northern wealth. It is pleasing to think, that almost by the unaided enterprise of one mind, what was in the memory of man the bare bank of a Highland river, is now a flourishing town, with its churches and market-places, its boarding-schools and academies, its shops and warehouses; that the silence and the solitude is now filled with the hum of human life, and that elegance and comfort have taken the place of those necessities, which chained down man to an estate so much beneath his physical capabilities as well as his immortal destiny.

Such is a meagre and general outline of the improvements which Sir John Sinclair planned, attempted, and successfully carried into execution in the shire of Caithness. Let it be remembered, that when he succeeded to his estate, the whole county might be said to be in a state of nature. The tenantry had not a single cart in their possession; and, even if they had, there was not a single road anywhere. Every article, not excepting manure, was carried on horseback, and the ground was almost everywhere cultivated on the common field, or alternate ridge system. So numerous were the disadvantages under which his improvements—by many they were considered mere innova-

tions—were commenced, that they would have daunted and cooled a spirit of ordinary energy and enterprise. He had not only to arrange plans, but he had to provide the adequate capital for carrying these into execution. He had not only to procure from other districts the hands requisite for various branches of the intended system of improvement, but he had to overcome the prejudices, many and deep-rooted, of the natives themselves, and stimulate them to worthy exertion. All this was carried on in the midst of a foreign war, which diminished the number of labourers, checked circulation in the remote provinces, and augmented public burdens, already but too severely felt. *How* successfully, however, may be attested by comparing the population census of the kingdom in 1810 *with* that of 1820. It will there be seen, that the proportionate increase is greater in Caithness than in any county in the British empire; and not only was the population numerically greater, but one of a very different kind, from what had inhabited these shores in previous generations. Enterprise, industry, morality, and religion, went hand in hand together. The coasts were occupied by extensive fisheries; and the soil, allowing for difference of climate, exhibited as excellent, and as skilful management, as the most celebrated districts of the Lothians.*

Pope, however, has well remarked, that "Envy will follow

* A native of Caithness (Mr George Anderson), was induced by feelings of gratitude, to bequeath to Sir John Sinclair, claims to a very large amount against the Nabob of Arcot. The bequest was made in the following terms:

"Having received the fullest assurances from the Right Honourable Henry Dundas, in person, and from the Minister, conveyed to me through the channel of George Rose, Esq. that my claims upon his Highness the Nabob of Arcot should be their business to see adjusted; as his Highness has candidly acknowledged the various sums lent him were for the use of the Honourable Company—I do hereby assign and make over the whole of those claims above stated, to my much respected friend, Sir John Sinclair, as the grateful tribute of his countryman, in order to enable him to carry into execution those patriotic measures, which his public spirit and his philanthropy have suggested, but which his fortune may not be adequate to."

As there was every reason to hope that a legacy, left in such terms as these would be made effectual, it was natural to rely on its being rendered available; but when the question came under the consideration of the Carnatic Commissioners, they found themselves, unfortunately, under the necessity of disallowing the claims, from the difficulty of procuring the necessary evidence from such a distance as Madras.

merit like its shade." Many minds were incapable of taking in the extent of operations, which to their feeble comprehensions seemed theoretic and Utopian. There was too much uprooting of old prejudices not to excite detraction and invidious surmises; and these feelings were necessarily aggravated by the circumstance of its being requisite to remove many from their humble, and rude, and unambitious, yet ancestral dwellings, to give scope for what sceptics set down as mere experimental speculations. Attacks, on this score, were made upon Sir John, even in some of the English newspapers. But to more than counterbalance the ignorance and ingratitude regarding the character of a great man, which these manifested, he was presented, in 1811 (when his plans had received "ample room and verge enough" for practical application), with an address from the Magistrates of Thurso, "acknowledging with gratitude, that, amidst other pursuits of a more extensive tendency, the improvement of his native county had been the peculiar object of his care and attention." Previous to this, the Lord Lieutenant and Freeholders of Caithness had tendered him a vote of thanks for having carried through so many measures, which had proved "a solid foundation for the future prosperity of the county." Before leaving this part of our subject, it is pleasing to add the testimony of one of the great living ornaments of the Scottish bar, to the merits of the subject of this biography. Mr Forsyth, in his dedication to Sir John Sinclair of the fifth volume of the Beauties of Scotland,—that containing the Account of Caithness,—eulogises him in the following terms:—"Sir, this volume is respectfully addressed to the distinguished promoter and patron of the important art to which nations owe their subsistence; of whom, in future times, it will be said, that he found means to diffuse among mankind a larger portion of useful knowledge than had been accomplished by any individual of his own, or of any former age." We make no commentary on these sentiments so true in themselves, and so simply, yet beautifully, expressed. On the one hand, it must have been delightful to know, that the merited subject of such a panegyric was of his own nation and generation; and, on the other, it must have been no small gratification to be thus made aware, that the

philanthropic labours, intended for the good of all mankind, were at least appreciated by the wise and good among them.

In 1788, Sir John Sinclair was created a Doctor of Laws by the University of Glasgow, and, in the same year, was married, for the second time, to Diana, daughter of Alexander Lord Macdonald, by whom he had thirteen children, seven of whom were sons, and six daughters. His oldest son, the present Sir George Sinclair, is member for the shire of Caithness.*

Having mentioned the success of Sir John's speculations, in carrying the system of sheep-farming into the northern districts of Scotland, we turn now to his exertions in an important branch of the same subject,—the improvement of *wool*.

Prior to this period, the introduction of turnips and other coarse articles of food had greatly deteriorated the quality of British wool, and ruinously depressed this hitherto most lucrative and important department of home-manufacture. The consequence was, that importation was, year after year, rendered more and more necessary; and the production of British fleeces ceased to be a principal source of national opulence. It struck Sir John as rather singular, that the Shetland Islands, on the other hand, should produce a wool of a very superior quality, and suitable for the softest and finest fabrics. With his usual

* When Sir George was a youth of sixteen, travelling on the Continent, an incident befel him, which, as it is highly honourable to the European reputation of his father, we cannot pass over without notice. The following extract is from a German newspaper, the *Erlanger Zeitung*, of the 18th October 1806, and was copied into many of the south German newspapers:—

"A few days ago a young Englishman who had been for some months at Gotha college, and was on his way to Dresden, along with his tutor, a native of Germany, was brought early in the morning by a horse-patrole before the Emperor Napoleon. The persons who arrested them took them for spies; something, however, struck them about the young man, and they brought him into the Emperor's presence, who in person condescended to examine them. His Majesty was gratified and much pleased to have an opportunity of shewing his regard for literature, and eminent characters of whatever nation; for the young Briton turned out to be the son of the well-known financial and statistical writer, Sir John Sinclair of Scotland, who had given his son the advantages of a continental education. It is unnecessary to add, that the interesting youth was furnished with a passport, by desire of the Emperor, and very civilly dealt with. It was remarked, that he had a plan of education, written by his father, upon him when arrested, and that plan saved him from the harshness of a rigid examination, and even personal danger."

avidity for information, he put out feelers everywhere; and at length, during the sittings of the General Assembly of the Scottish Church in 1791, of which he was a lay-member, he found, in the person of a clergyman from that remote quarter, an individual capable of enlightening him on this subject. His first impulse was to bring the subject before the Highland Society; but, discovering that their funds were inadequate for the prosecution of his object to any available extent, he resolved on instituting a Society, solely for the purpose of improving British wool. The institution once established, its business was prosecuted with an energy almost unexampled. To ascertain the merits of the respective breeds in the British dominions, intelligent individuals were sent to the principal districts, and accounts of their investigations on the subject were submitted to the public. Specimens of a valuable breed, from the neighbourhood of the Cheviot Hills, were distributed throughout Scotland; the custodier of the royal flock of France, M. D'Aubenton, sent several rams and ewes to the Society; and from Italy, from Iceland, and even from Abyssinia, and the East Indies, specimens were procured by the exertions of spirited and enterprising members

Such was the success of the Institution; and still more to get the public mind interested in these beneficial inquiries, it was resolved to hold a great sheep-shearing festival. At first sight this might appear rather *outré* and overstrained; but the proof of its applicability to the purpose intended was judged of by its success. It was held at New-Hall Inn, on the 1st of July 1791. About one hundred and ten individuals of rank and distinction were present, of whom seventy were gentlemen, and fifty ladies; and the company were received as they arrived by Sir John, the chairman of the Society. A grass plot in the garden of Mr Dundas of Duddingston was appropriated to the purpose of the exhibition; specimens of various kinds of wool were shewn, and dressed skins of a variety of different breeds, with the fleeces adhering; while the grounds were set off with suitable decorations. Sheep of various countries were collected in the garden, and on the neighbouring banks,—Spanish, English, Scottish, Shetland, and a few Abyssinian, sent by Mr Dundas of Dundas.

After the sheep-shearing, during which the superiority of Mr Cully's clipper was greatly admired, the wool of the various breeds was labelled and exhibited, with remarks on the peculiarity of texture, by which each was characterized.

The evening of the auspicious day was spent in conviviality and dancing; and, when the chairman gave as his first toast after dinner, "The Royal Shepherd of Great Britain, and success to his Flock," a round of twenty-one guns was fired by the Hind Frigate, which lay at anchor on the adjacent coast. Besides a large proportion of the nobility and gentry of Scotland, who made up the company, Sir Thomas Blackett, Mr Askew, and others, came even from England to be present on the occasion.*

In the May of the previous year the idea of that great national undertaking, the Statistical Account of Scotland, had suggested itself to the mind of Sir John Sinclair; and being, as we have mentioned, a lay member of the Assembly of the Church, it occurred to him that he might be able to prevail on a great proportion of the clergy to furnish such general information regarding the state of Scotland, as should afford data for an estimation of the political situation of that portion of the United Kingdom. His original plan was to draw up a general statistical view of North Britain, without reference to parochial districts; but such a mass of useful facts and observations was presented in the communications sent him by the clergy, that this more abridged idea was set aside, and the work prepared

* "The ladies were in general dressed in white muslin with flowers, and various coloured ribbons; and each bore a shepherdess's crook, decorated with taste and fancy. The day being favourable, the appearance on the green, of so much beauty and elegance, afforded a spectacle at once pleasing and interesting. And here none was more distinguished than the venerable patriotic Countess Dowager of Dundonald, whose hat was decorated with a bandeau of wool from her own flock, and dyed by herself of various beautiful vivid colours, which had a fine effect. Several of the gentlemen were presented by her ladyship with cockades, and other ornaments of this material. The gentlemen were dressed variously, as taste and fancy suggested. Some of them appeared in cloth made from their own flocks, with crooks on their buttons, &c. and some of the ladies in gowns of their own spinning.

"As this was the origin of the sheep-shearing festivals, which have since promoted such a spirit of improvement in the country, it was thought proper to preserve an account of it in this Appendix."—*Henderson's Caithness, Appendix, No. VI. pp. 105–6.*

for press in the more extended form in which it was given to the world.*

The mode which Sir John adopted for obtaining information on the different divisions of his subject, was by printing and circulating queries respecting the geography and natural history of each parish, its population, and productions. Miscellaneous questions followed, and the addenda to the whole were these—1. What is the state of the roads and bridges in the parish? how were they originally made? how are they kept in repair? is the statute-labour exacted in kind, or commuted? are there any turnpikes? and what is the general opinion of the advantages of turnpike roads? 2. What is in general the rent of the best arable, and the best pasture or meadow grounds per acre? what the rent of inferior? 3. What in general is the size and the average rent of the farms in the parish? and is the number of farms increasing or diminishing? 4. Is the ground in general inclosed or uninclosed? and are the people convinced of the advantages of inclosures? 5. What was the situation of the parish anno 1782 and 1783? please state any curious or important circumstances connected with that era, or with any other season of scarcity? 6. Are there any curious or important facts tending to prove any great alteration in the manners, customs, dress,

* "About this time a plan had been formed to establish a Society for the Benefit of the Sons of the Clergy belonging to the Established Church of Scotland, and it accidentally occurred to me, that some public assistance might be procured for so useful an institution, as an acknowledgment to the clergy for their statistical exertions.

"Sir Henry Moncreiff and Dr Hardie, who took an active part in the concerns of the Society, expressed great doubts respecting the practicability of obtaining such a grant; but the Society having at last been prevailed upon to resolve on sending a petition to the Crown, the application was transmitted to Mr Secretary Dundas, who, in a communication to me upon the subject, said, 'That he felt peculiar pleasure in submitting to his Majesty's consideration the petition for a grant to the Society for the Benefit of the Sons of the Clergy, more especially as they had so handsomely stepped forward to aid so important a public object as the Statistical Account; and he hoped that such a mark of royal favour as his Majesty had determined to bestow would have the effect of rendering them more and more zealous in their statistical researches.' The sum granted was L.2000.

"The exertions made by Sir Henry Moncreiff and his friend Dr Hardie in establishing this Society did them the greatest credit."—*Correspondence of Sir John Sinclair*, vol. i. p. 294.

style of living, &c. of the inhabitants of the parish now, and twenty or fifty years ago? Additional queries were given to those resident in cities and towns relative to the history and antiquities of the place, its municipal government, right of parliamentary representation, and number of electors, and comparison between its ancient and modern state with reference to population, shipping, commerce, fisheries, and manufactures.*

Having received a number of returns in consequence of the circulation of these queries, and some of them drawn up in a regular form, Sir John resolved on the printing of a volume of parochial reports; and he put this determination into execution in January 1791, on his return from London *to* Edinburgh, whither he had been in the discharge *of* his parliamentary duties. This specimen volume contained only the accounts of four parishes—Jedburgh, Holywood, Portpatrick, and Hounam,—and a thousand copies were thrown off for distribution among the clergy. Each copy was accompanied by a printed letter, containing some queries additional to those already sent, regarding schools, alehouses, and inns, new houses, employment of cottagers in agriculture, number of prisoners in gaol, and causes of imprisonment, as also tables of births, marriages, and deaths.

After great and unwearied exertions, Sir John succeeded in bringing the first volume of this great work before the public on the 25th May 1791, just a year after its suggestion to the members of the church. It proved so far superior to any thing of the kind which had ever before appeared, that it could not be supposed to have otherwise than given great satisfaction, and all who were interested in the improvement of the country or the welfare of its inhabitants came at once forward for its patronage and support. Much difficulty was, however, found in the furtherance of the undertaking, from Sir John being necessarily so much absent from Scotland, and consequently obliged to rely on others not only for preparing the communications, but for correcting the press. The leisure afforded by a parliamentary recess greatly aided the bringing out of the second volume, which was one of peculiar interest, from the mass of curious and valuable matter it contained.

* Vide Appendix B. to volume twentieth of Statistical Account of Scotland, p. 18–35.

Still it was very difficult to get many individuals of the clergy roused to exertion; and it required some inducement to prevail on the backward to prosecute the necessary inquiries. It had been arranged from the commencement that the profits of the publication should be gifted to the society instituted for the benefit of the Sons of the Clergy; and it occurred to Sir John, that a royal grant might possibly be procured for the same benevolent purpose. He accordingly made application to his Majesty through Lord Melville, then Mr Secretary Dundas, and two thousand pounds were the fruits of this well-timed intercession. By the accession of this sum to their funds, the Society were enabled to commence their allowances to the sons of the clergy much sooner than it would otherwise have been in their power to have done.

Many circumstances yet occurred to prevent unanimity among such a large body as the clergy of the Church of Scotland. From the commencement some had thought the scheme chimerical, and others had openly professed their dislike to it, nor did they now care about retracting opinions rashly given. Old age and infirmity prevented others; and not a few were unable to overcome the jealous fears of their parishioners, who set down the whole as a deep laid scheme of government to accomplish some new plan of taxation. Nor did the tenants in country parishes relish inquiries about their farm produce, and the value of their stock, lest landlords might avail themselves of the information, by increasing their rents. Such an array of counteracting difficulties would have daunted and destroyed the energy of any common mind. After waiting another twelvemonth, during which he had written many thousand letters, Sir John found, on the 1st June 1792, that there was still a deficiency of not less than four hundred and thirteen parochial accounts.

In this dilemma various plans were suggested for accomplishing the completion of this great national work. A recommendation from the General Assembly was one of the measures resorted to, and several of the leading ornaments of the church, among whom may be mentioned Principal Robertson, Dr Blair, Sir Henry Moncreiff Wellwood, Dr Kemp, and Dr Hardie, made personal application to their clerical friends, to exert them

selves within the bounds of their several presbyteries. Added to these, the Duke of Argyle, the Earl of Leven, then Commissioner to the Assembly, the Earl of Fife, and other extensive landed proprietors and church patrons, exerted themselves in the cause; yet Sir John was still destined to find, that some, from unwillingness to engage in the undertaking, would do nothing; and that others, from a spirit of procrastination, promised with little intention of performing.

Notwithstanding all these multiplied and mortifying difficulties, Sir John was determined not to be baffled in the accomplishment of the Herculean task which he had set himself. He engaged five statistical missionaries, to whom he appropriated different divisions of the country. To *one* were allotted the Western Islands; to a second the counties of Aberdeen and Banff; to a third the presbyteries of Dunkeld and Perth; to a fourth the shires of Dumfries and Galloway; and to a fifth the Orkney Islands; and, by their means, the accounts of no less than twenty-five parishes, which must otherwise have been totally awanting, were ably and accurately drawn up.

The undertaking seemed now in a fair way to its final accomplishment, and the reports, as they were received from the clergy, were transmitted to Sir John, who was at the time in London, to receive his sanction, and be incorporated in the work. Lists of the whole were now made up; but what must have been his discouragement to find, that no less than twelve parochial accounts, supposed to have been received, were nowhere to be found. The uneasiness occasioned by this untoward circumstance it is impossible to describe, and is said to have been more disheartening to the enthusiastic mind of the editor, than any thing which had occurred in the whole course of the undertaking. But he once more buckled on the armour of perseverance; and, on the 1st of January 1798, seven years and a half after its commencement, the work was brought to its completion. The attempt was quite unique in the history of literature, as not less than nine hundred persons were engaged in it, under the direction of one person, and that a private individual, who was necessarily at once the animating spirit and the bond of union connecting the whole. The work was comprised in twenty thick octavo volumes; and to these another was subsequently annexed, contain-

ing some additional materials; accounts of the University of Glasgow, and the Old and New Colleges of Aberdeen; together with a copious index to the contents of the whole series.

It was thus that a Work was carried on to a successful termination, whose commencement, whether we consider its extent or the difficulties besetting its accomplishment, would have completely daunted ordinary enterprise. For some time after Sir John had formed the scheme, and was planning in his own mind how it could best be carried into execution, he could not find the countenance of a single individual. All thought ill of its practicability—no one could oversee the obstacles encompassing it on every side. Even after he had put his shoulder to the wheel, and had fairly commenced his task, prognostications of failure were heard from all quarters. Mr Newte, in his Travels, published about this time, thus alludes to the undertaking:—"There have not been wanting different persons, public-spirited indeed, but perhaps of too sanguine dispositions, who, struck with the subserviency of parochial distinction, to the advancement of both civil and natural history, have addressed letters to the different parishes of Scotland, and particularly to the clergy, inviting them to a correspondence, on whatever might appear most curious and interesting in their respective divisions. These gentlemen do not reflect that there is no individual, however distinguished by genius, rank, or fortune, or even by a happy or rare union of all these advantages, who can possibly be considered by a whole nation as a fit centre for such general co-operation."*

The unwearied perseverance, and the inflexible industry of Sir John Sinclair, however, shewed, as the work went on, that almost nothing is impossible to efforts unceasingly directed to a proper object, however apparently unattainable that object may at first sight appear. By degrees an irradiation of hope glimmered on the incredulity of the multitude; and what had been denounced as wholly and utterly impracticable, and which probably in any other hands than those of Sir John Sinclair would have proved so, appeared only in the light of a gigantic and Herculean labour. Some who had been shamed out of their scepticism came forward with the language of congratulation,

* Newte's Travels, 4to, p. 427. London, 1791.

and others, interested in the prosecution of the work, approached at the eleventh hour to participate in the triumphs of its success. It ought to be mentioned, that one of the earliest of those that cheered on Sir John in this great undertaking, was the celebrated George Dempster of Dunnichen.* In a letter dated 14th February 1791, he thus writes: "The reason of my troubling you at present, is to return you my thanks for the specimen of the statistical observations. This is a most valuable and useful book. It is a real Doomsday book, and promises to be more read and quoted than any book printed since Doomsday book. The older it grows the more valuable it will prove. The object of this letter is to entreat you to *go on* with it." On the 22d May, we find the Marquis del *Campo*, the Spanish Ambassador, thus addressing *him*: "I have read with great pleasure indeed, the prospectus you have been so good as to send me, and I admire the manner in which the general inquiry regarding the political state, population, industry, &c. of a kingdom is treated." And the Prussian Minister, the Comte de Redern, is still more warm in his admiration: "The interesting details contained in that work," he says, in a letter dated 14th July of the same year, "cannot fail to make the public impatient for the conclusion of so great an undertaking. The plan embraces all those objects on which depends the prosperity of political society; and the researches founded thereon, seem to be equally extensive and laborious." Still more cheering and important was the following testimony from Comte de Hertsberg, formerly the Prime Minister of Frederick the Great of Prussia and a person of great intellect and accomplishments. His letter to Sir John was dated 19th August 1792: "I return you many thanks for your analysis of the Statistical Account of Scotland, and wish I could converse with you on a number of objects, which are equally interesting to both our countries. I entirely approve of your very excellent idea, that of investigating the interior state of every district, by reports from the ministers of each parish; and I am of your opinion, that, if provided with good models, no class of men could be more proper for such an important undertaking than the parochial clergy, who have

* "A garter gie to Willie Pitt,
A title Dempster merits it."—*Burns.*

usually the requisite knowledge and capacity, as well as the necessary leisure, for that purpose. I earnestly wish that I could imitate here, in my dear country, your very patriotic example." In a subsequent letter, dated Berlin, 1793, the Comte says, "I have to return my best thanks for your interesting work, the Statistical Account of the Parishes of Scotland. I find the plan particularly well formed; and if I were again at the head of the Prussian Cabinet, would carry it into execution here." We could add to these testimonies others equally gratifying from Professor Zimmerman of Brunswick; Monsieur Plescheef, author of the Geographical View of the Russian Empire; from Professor Thorkelin of Copenhagen; from Mr Adams, the President of the United States of America; from Lord Auckland; from Mr Pinkerton, and from Dr Guthrie, the Geographers; from Dr Gillies the Historian, and many others. We cannot, however, pass over, without quotation, the countenance and encouragement given to Sir John in the prosecution of this great work, by the greatest of American statesmen and generals, George Washington. His letter is dated the 15th March 1793: "I cannot but express myself highly pleased," says he, "with the undertaking in which you were engaged (that of drawing up the Statistical Account of Scotland), and give my best wishes for its success. I am fully persuaded, that when enlightened men will take the trouble to examine so minutely into the state of society, as your inquiries seem to go, it must result in greatly ameliorating the condition of the people, promoting the interests of civil society, and the happiness of mankind at large. These are objects truly worthy the attention of a great mind, and every friend to the human race must readily lend his aid towards its accomplishment."

Stimulated by the success which had attended the exertions of Sir John Sinclair, the same plan was attempted in various countries on the Continent, but in none with the perfect success with which it has been accomplished in Scotland. That, seconding the exertions of Sir John, great merit is due to the clergy, we most readily admit. In the Statistical Accounts of their separate parishes they have raised a monument to their talents, acquirements, and observation, highly honourable not only to the religious establishment to which they belong, but to

the national character.* Yet, on the other hand, it must be allowed, that without such a man as Sir John Sinclair to direct inquiry, and to concentrate into harmony and order the loose and unshapely mass of information accumulated, to make up what was deficient, and to prune away what was redundant, the work could never have assumed the form in which it has come forth to enrich our literature. Without partiality it may be asserted, that it is the most comprehensive and complete, and consequently the most valuable publication on statistics extant in any language; and so little has its plan been found capable of improvement, that, with slight variation, it forms the model of the admirable refacciaments now in the course of publication.† Indeed, every one competent to judge of the difficulties encompassing such a subject must, taking it all in all, accede to the enconium pronounced upon it by Malthus, that it presents "a better picture of the internal state of a country, than has yet been presented to the world."‡

* In reference to this work, the Comte d'Hautrive, in his "Elemens d'Economie Politique," (Paris, 1817) p. 368, has the following remark:—"L'Ecosse est le pays où l'esprit d'observation est aujourd'hui le plus perfectionné."

† See Introduction to number first of New Statistical Account. Nine parts have already appeared, and many of the reports are of first-rate excellence. The parochial division has been adopted, and the parishes are exhibited under their respective counties. The following divisions have been adopted:—1. Topography and Natural History; 2. Civil History; 3. Population; 4. Industry; 5. Parochial Economy. A county Map is given with each number. It is intended that the work shall be concluded by a general summary, descriptive of the whole statistical condition of Scotland; and it is expected that all the materials will be condensed into ten octavo volumes. It is conducted by a committee of the Society for the Benefit of the Sons and Daughters of the Clergy.

‡ Malthus on Population, edition first, 1803. Vide p. 13 and 14, note.

(*To be continued in next Number.*)

THE

QUARTERLY

JOURNAL OF AGRICULTURE.

BIOGRAPHICAL MEMOIR OF THE LATE RIGHT HONOURABLE SIR JOHN SINCLAIR, BARONET, FOUNDER AND FIRST PRESIDENT OF THE BOARD OF AGRICULTURE, &c.

(*Continued from* vol. vi. p. 602.)

We have spoken of the Statistical Account of Scotland as a great national undertaking, equally honourable to Sir John Sinclair who planned, and to the Clergy of the Church of Scotland who seconded him in the accomplishment. We have also hinted at the general scepticism, which might have damped a less ardent spirit at the commencement of that laborious investigation, as to the chances of carrying such a gigantic scheme to a successful termination. Nor is it to be wondered at, if it was regarded generally as one fraught with difficulties, seeing that it had so signally failed in most of the countries where it has been before attempted; and that, in none had it succeeded to any general extent. Works requiring great expenditure of time and labour have been not only projected, but accomplished by individuals, the exertions of course depending on themselves, and the means of information lying within a sphere, which, with these exertions, it was possible for them to reach. But here the difficulty lay of rousing others to exertion—in inspiring them with just views of the importance of the end to be attained. The cordial co-operation of hundreds was necessary, most of whom, it is to be feared, were little less than lukewarm, and not a few undisguisedly opposed. It is only necessary to take a slight European survey of what had been attempted in this way, and

of what had failed, previous to the successful accomplishment of Sir John Sinclair's Statistical Account of Scotland, that we may be made aware how arduous was that task, and how great was the triumph over its difficulties.

So far back as 1575, as we are informed by the Reverend Mr Townsend in his Travels through Spain,* a schedule of questions had been addressed to all the prelates and corregidors of that country, by Philip II., a copy of which he had seen at Barcelona. A report was required on no less than fifty-seven heads, relating chiefly to geography, natural and civil history, agriculture and mineralogy, together with several others purely statistical. It is evident from these queries, that Philip wished to gain a knowledge of the internal state of his kingdom; but Mr Townsend was not able to find out any papers containing the corresponding answers; and, as no notice of the inquiry is taken by any of the historians of the period, it is probable that the scheme was never generally followed out.

In Sweden, the celebrated Gustavus Adolphus made the second attempt of this nature that we find recorded in European history. This took place in 1630; and was conveyed in the shape of a circular from the Archbishop of Upsal to the clergy of his diocese. It related principally to matters of antiquity; but was extended to every thing which could be supposed to add to the prosperity of the country.† The information thus collected was to be deposited in the Royal Cabinet, and the results were to be afterwards published for the benefit and improvement of the kingdom. The third attempt of which notice has been taken was made in France by Louis Quatorze, about 1698; but the accounts of the different provinces, ordered to be drawn up by the intendants, were never published. With regard to this undertaking, Vol-

* Townsend's Travels through Spain, 2d edit. vol. iii. p. 351. *Vide* also Statistical Account of Scotland, vol. xx. Appendix to Introduction, p. lxxi. [illegible] and Analysis of Statistical Account, 1807, part 1st, p. 64. *et seq.*

[illegible] a translation of this document, which is extremely curious, by Mr [illegible] Gottenburgh, in Appendix to Introduction to vol. xx. Statistical [illegible], 71–2.

For a more modern view of the political state of Sweden *vide* "Mémoires pour servir à la Connoissance des Affaires Politiques et Œconomiques [illegible] par Monsieur Canzlen," Dresden, 1776.

taire has well remarked, that "had it been well executed, the collection would have been one of the most valuable monuments of the age." He mentions with great approbation the account of Languedoc, which he had read in the manuscript;* but Sir John Sinclair having, through the kind attention of Dr Nash of Bevere in Worcestershire, had an opportunity of examining the same document, found it incredibly defective and meagre, and but a wretched specimen of what such an investigation ought to be. In the more laborious nation of Germany, statistical observations were made on a much more extensive scale, and Baron Bielfield has given an admirable account of the progress which such inquiries had made in that portion of the Continent.† The particulars which he has included as belonging to statistics, are much more extensive than had hitherto been comprehended as appertaining to that department of science. He takes in geographical position and general history, account of population, arrangement of public affairs, laws and political rights, church and judicial governments, police regulations, revenues and modes of collection and expenditure, state of arts and science, military and marine strength, resources from agriculture, natural productions, internal and external commerce, together with political relations to other states. To Professor Zimmermann‡ the public are indebted for conveying to them, in a tangible shape, the mass of information collected in the wide field of German statistics. In Denmark we only find some tables of the finances of that country, of its debts, expenditure, army and navy, which, printed in the German language, were only partially circulated by the government of that country, and never published.

When we turn from the Continent to the British isles, we find, that inquiries of this nature, on a limited or more extended scale, have long occupied attention. In 1081, a great survey of England was ordered by William the Conqueror, which was undertaken, to ascertain the income of the crown, and which has

* Voltaire, Siecle de Louis XIV. vol. ii. p. 128. ed. 1752.

† Elements of Universal Erudition, translated by Dr Hooper, three vols. 8vo. 1770. *Vide* vol. iii. cap. 13.

‡ Political Survey of the Present State of Europe, 8vo. 1767.

been termed "*Doomsday Book.*"* It was six years in finishing, and gives an exact account of the landed property of the kingdom at that time. In general, the extent of proprietorship is given,—tenures, value, quantity of meadow, pasture, wood, and arable ground, and in some counties, we have the number of tenants, cottagers, and serfs who lived upon them. It is altogether an invaluable document, regarding the ancient state of England. We learn, from the British Topography of Gough, the indefatigable antiquarian,† that, at the time his work was published, nine out of the forty English counties had then found no historian, and that the collections, which had been made for eight others, had been withheld from the public, as late as 1780. These county reports are in general very incorrect and immethodical, written in an unpolished style, and inadequate to fulfil the end for which they were intended. We mention the justly celebrated Britannia of Cambden, only to say, that its value consists much less in being a politico-economical, than an antiquarian manual; and the Political Survey of Great Britain by Dr Campbell, as a laborious work, full of intelligence, so far as it goes, but incomplete, in a melancholy degree, from want of materials.‡ The institution of the Board of Agriculture, which was moved for in Parliament by Sir John Sinclair, on 15th May 1793, was intended for statistical as well as agricultural objects; but, as we will almost immediately have occasion to allude to this subject at some length, suffice it to say, that, with regard to it, the arrangement which had been made for instituting parochial surveys, was afterwards abandoned, for the less sa-

* "This monument," says Hume, "called *Doomsday Book*, the most valuable piece of antiquity possessed by any nation, is still preserved in the Exchequer, and though only some extracts of it have hitherto been published, it serves to illustrate to us, in many particulars, the ancient state of England. The great Alfred had finished a like survey of the kingdom in his time, which was long kept at Winchester, and which probably served as a model to Wil... in the undertaking." History of England, vol. i. p. 275., Ed. 1778.

† ... Topography vol. i. p. 91.

... Britain, 3 vols. 4to. 1774. Of this work ... "The Doctor, unfortunately had not ... such a work, in the manner in which it ... Had he lived a few years hence, possessed as he ... judgment his labours would have appeared to infi... advantage

tisfactory system of county reports. In Ireland, the difficulties of obtaining information generally, were still greater, and the attempts made, at various times, to elucidate the statistics of that country, have been far from successful. Petty and Molyneux founded a society for philosophical investigations, but its existence only drawled out to the short period of five years; and it was succeeded by another, in 1760, by which a plan for drawing up descriptions of counties was promulgated, but that object was never attained. The Dublin Society, in 1773, printed a number of queries, and distributed them among the clergy; but, although 4000 circulars were sent round, only forty answers had been obtained at the end of four years, and a majority of these were trifling, meagre, and valueless. The scheme was therefore given up as hopeless, even by the enthusiastic Colonel Vallancy, who had been its principal promoter;* and, although it was subsequently taken up by Mr Shaw Mason, by whose exertions a number of parochial accounts were obtained, it was found impracticable as a whole, and ultimately abandoned.

With regard to Scotland, the spirit of statistical inquiry very early shewed itself; and, so far back as 1662, we find Bleau at work with his *Atlas Scotiæ*, to accompany which, Sir Robert Gordon of Straloch, assisted by David Buchanan, drew up a description of several of the counties; but the civil wars of Charles I. unfortunately put a stop to their peaceful investigations. Sir Robert Sibbald originated the next attempt, but his inquiries were principally directed to the field of natural history; and his work, entitled *Atlas Scoticus*, still exists, according to Gough, in manuscript.† The late Walter Macfarlane of Macfarlane, whose MS. collections are still preserved in the Advocates' Library, left behind him a geographical description of several parishes, drawn up in 1772, and the immediately subsequent years.‡ An attempt of the same nature was made by

* "A zealous and public spirited member of the Irish Parliament (the Right Hon. William Burton Conynham), transmitted to me an account of the parish of Kilronan, in the county of Roscommon and the adjoining district, written by Mr Charles O'Connor, and dated Ballytra, near Carrick, 25th August 1773, which he informed me, was the only one worth preserving in the whole collection." Sir John Sinclair, in vol. xx. Statist. Acct.

† Topography, vol. ii. p. 557.

‡ "Who was the author of this attempt," says Sir John Sinclair, "does

Maitland, the well known author of the History of London, who circulated a number of printed queries; but the answers he received were so few and trifling, that the design was given up as abortive. Far more extensively successful than any of the preceding, was the undertaking of Dr Webster, begun in 1743, and completed in 1755, for ascertaining the state of the church, and the population of the kingdom. The work is now principally valuable as affording data for comparing the population of Scotland at the time it was drawn up, with the census of later years. We should also notice the attempts to procure information from the clergy, made by the distinguished naturalist Mr Pennant, whose works breathe throughout such a kindly feeling towards Scotland; and, by the late Earl of Buchan, as connected with the Society of Scottish Antiquaries. The wishes of Mr Pennant were but limitedly acceded to; and the society could only muster accounts of five parishes,—certainly of a valuable description—which are printed in the first volume of their transactions.

Such is a brief outline of the statistical inquiries regarding Europe in general, and Scotland in particular, which preceded the great and successful undertaking of Sir John Sinclair; and we have given it to shew, that those who looked primarily on the accomplishment of such a plan as chimerical, were not without ample grounds for indulging their scepticism. But the welfare of the human race seemed at all times to be uppermost in his mind, and such was his nerve and enthusiasm, that where good was the ultimate object, and that good at all within the verge of possibility, he was not to be daunted or deterred by envy, unworthy jealousies, difficulties, or delay. He kept the end of his labours steadily in view, and he knew well that nothing truly great is easily attainable. That a measure of self-gratulation may have sometimes infused itself, we doubt not, and can well pardon, for none are perfect; and we can believe his own words, when [illegible] declares to us, after mentioning that his undertaking [illegible] universally sneered at as impracticable, that "per[illegible]ation to accomplish what others had failed to execute,

[illegible] from a letter, beginning 'Reverend Sir,' signed Lud. Grant, [illegible], 14th July 1732; it seems to have been undertaken by some [illegible] Vide Appendix to vol. xx. Statistical Acct. p. 79.

was a stimulus to those efforts which carried through so great a work." He then adds, with becoming humility, that "its success is, in a great measure, to be attributed to those who entered daily with zeal into the cause, and encouraged the author to persevere, by their approbation and assistance."* We may fitly leave this part of our subject by extracting part of Mr Brown of Markle's dedication of his popular treatise on Rural Affairs to the subject of this memoir. "Often have I admired," he says, "the wisdom of your measures, and the steady perseverance displayed in bringing them to a happy issue. Obstacles might retard their success for a time, but these obstacles could neither damp your ardour, nor cause you to lose sight, for a moment, of the objects you had in contemplation. Perseverance is rarely bestowed upon great geniuses; but fortunately for the public, you are gifted with a stock of this quality, sufficient to remove difficulties of the greatest magnitude. When the Statistical Account of Scotland was set on foot, many people considered it as an undertaking which would never be finished. It was, however, soon proved, that the difficulty of the task served only to increase the force of your exertions."†

It was in 1790, as we have said, that Sir John Sinclair commenced in earnest with the Statistical Account of Scotland, a work which was not completed till 1798; but, in the interval, his active mind teemed with projects for the amelioration of society, and the aggregate happiness of the human race. We have already alluded to the first sheep-shearing festival, and it was on the 31st January 1791, that he proposed, at a meeting held in Edinburgh, the utility of establishing a society in Scotland, for the improvement of British wool. Of this society, as we have said, he was chosen president; and it continued to flourish for several years, during which a mass of useful information was collected, and a variety of experiments, connected with that important branch of rural economy, received sanction or disap-

* Analysis of Statistical Account, part first, p. 69-70.

† Brown's Treatise on Rural Affairs, vol. i. p. 7. The writer of this notice had some correspondence with Mr Brown, on the subject of the memoir of Mr Rennie of Phantassie, which appeared in No. 5. of this Journal. He had also the melancholy pleasure of a visit from him a few months before his death.

proval. * Indeed so great was the enthusiasm manifested by its members, that Sir John became impressed with the idea, that an institution for the improvement of agriculture, in an extended and comprehensive point of view, if patronized by Government, might be of the greatest consequence to the best interests of the British Empire.

With these convictions, Sir John Sinclair, in May 1793, printed and circulated a plan for establishing a Board of Agriculture and Internal Improvement, in which he pointed out the nature of its plan, and the beneficial results which might be expected from it. On the 15th of the same month he moved, in his place in Parliament, an address to the Crown, in favour of the proposed establishment. An animated and interesting debate took place on the occasion, which was adjourned till the 17th, when, on a division, it was carried by a majority of 75; 101 voting in its favour, and only 26 opposing it. In candour to the memory of Mr Pitt, it is but here right to acknowledge, that all the exertions of Sir John would have been in vain, at this time, had not the minister backed him, with the whole strength of his talents and influence. In an able speech on this occasion, Sir John endeavoured to shew the obvious advantages of such a Board, in a variety of lights. In the first place, he regarded it as a general magazine for agricultural knowledge, and a society of reference, to which any question might be sent, connected with the improvement of the country. In the second place, he shewed, that by agricultural surveys, carried on under the auspices of such a Board, every fact or observation known in this country, connected with the improvement of the soil, or the stock it maintained, would soon be collected. In the third place, that by establishing an extensive foreign correspondence, the discoveries and improvements appertaining to other lands, would be much sooner and more widely rendered available, than if de-

* For an excellent and circumstantial account of the origin and progress of the Society for the Improvement of British Wool, the reader is referred to Mr Robertson's valuable work On the Agriculture of Mid-Lothian. Vide Appendix to that survey, No. 3.

In 1790, Sir John Sinclair published a pamphlet entitled "Report on the subject of Shetland Wool;" and in 1791 another, which formed the substance of "Address to the Society for the Improvement of British Wool, constituted at Edinburgh.

pendent solely on private exertion. In the fourth place, that it was only through the means of such a Board, that any general improvement of stock could be looked for; and that, in the last place, it might be the instrument of obtaining a statistical account of England. Sir John also proposed that the board should be entrusted with the privilege of franking, a point of very great importance, as without it no information could be rapidly spread over the country, except at an enormous expense. He suggested that the parliamentary grant should not exceed L. 3000 per annum; that the experiment should only have a trial of five years, in case of its not fulfilling the anticipations of utility be expected from it, and that the members should act without any emolument whatever.

On these grounds, Sir John moved an address to his Majesty on the subject; and the Board, soon after, was not only appointed, but received a charter from the Crown, in which he was nominated its first president. * To give the Board more weight and consequence, all the great officers of state, the two Archbishops, and the Bishops of London and Durham, were, *ex officio*, made members, in conjunction with thirty-one ordinary members.

It was soon sufficiently perceptible, that the institution would be fraught with the most important advantages to the nation, and the most distinguished characters were proud to have themselves enrolled as ordinary members, that they might be enabled personally to attend its meetings. From the spirit of enterprise and intelligence which was thus introduced, an immediate impetus was given alike to the study and the practice of agriculture, which assumed a dignity and importance which had not hitherto been attached to its cultivation. †

* For copy of the Charter of the Board of Agriculture, vide Communications to the Board of Agriculture, vol. i. 4to. Ed. 2d. Preliminary Observations, Appendix c. p. x–xvi.

† A curious literary bet was connected with this transaction, which we must here notice.

"Sir John Sinclair having accidentally mentioned to Mr Arthur Young, his intention of moving in Parliament for the Establishment of a Board of Agriculture, Mr Young said "that it was perfectly unnecessary to take that trouble, as there was not the least chance of success;" and the two authors differing in opinion, they resolved to lay a literary wager, which of them should

The following is the original list of the Members of the Board, as extracted from the charter:—Sir John Sinclair, Bart. President; John, Lord Archbishop of Canterbury; Alexander, Lord Loughborough, Lord High Chancellor of England; William, Lord Archbishop of York; Charles, Earl Cambden, Lord President of the Council; Granville Levison, Marquis of Stafford, Lord Keeper of the Privy Seal; William Pitt, Esq. First Commissioner of the Treasury; John, Earl of Chatham, First Lord Commissioner of the Admiralty; Beilby, Bishop of London; Shute, Bishop of Durham; William Wyndham, Baron Grenville, and Henry Dundas, Esq. the two Principal Secretaries of State; Charles Duke of Richmond, Master-General of the Ordnance; Henry Addington, Esq. Speaker of the House of Commons; Sir Joseph Banks, President of the Royal Society; John Robinson, Esq. Surveyor-General of Woods and Forests; and John Fordyce, Esq. Surveyor of the Crown lands; all *ex officio*. To these were added, Augustus Henry, Duke of Grafton; Francis, Duke of Bedford; Henry, Duke of Buccleuch; Thomas, Marquis of Bath; George, Earl of Winchelsea; James, Earl of Hopetoun; William, Earl Fitzwilliam;

prove in the right. Mr Young betted his Annals of Agriculture, against Sir John Sinclair's Statistical Account of Scotland.

"Soon afterwards, Sir John Sinclair wrote Mr Young that he was to have a conversation with Mr Pitt upon the subject, and that he would certainly gain his bet. Mr Young in his answer, dated 10th January 1793, said, "You are going *to* Mr Pitt, and I am to lose the wager; when you come *from* Mr Pitt, I shall win the wager. Pray don't give ministers more credit than they deserve. In manufactures and commerce you may bet securely, but they never did, and never will do, any thing for the plough. Your Board of Agriculture will be in the moon; if on earth remember I am to be secretary, provided the salary is good."

"After many delays in consequence of the very critical state of public affairs, the motion at last came on, and was carried by a large majority, and Sir John Sinclair had the satisfaction of announcing to Mr Young his success, and informing him, at the same time, that he had him in view for secretary. Though he lost his bet therefore, yet Mr Young sent his Annals to the bind- er, and presented this copy to the president of the New Board."

The foregoing anecdote, related in the exact words we have given, is extracted from a fly leaf to the first volume of a handsome copy of the Annals of Agriculture, presented, on the occasion alluded to, by Mr Young to Sir John Sinclair. It is in a fine handwriting, but whether Mr Young's autograph or not, we are not certain.

George Wyndham, Earl of Egremont; James, Earl of Lonsdale; Francis, Earl of Moira; John Joshua, Earl of Carysford; Richard, Bishop of Landaff; Martin Bladen, Lord Hawke; Edward, Lord Clive; John Baker, Lord Sheffield; William Wyndham, and Charles Marsham, Esqs.; Sir Charles Morgan, Bart.; William Pulteney, Thomas William Coke, Thomas Pouys, Henry Duncombe, Edward Loveden Loveden, John Southey Somerville, Robert Barclay, Robert Smith, George Lumner, John Conyers, Christopher Willoughby, and William Geary, Esqs. England may look back to such a list with proud exultation; it contains names, which in history, in science, and art, have made her famous; and here were they conjoined together by a good and gracious king, the Father of his People, for the most pacific and benevolent of all purposes, the amelioration of human society. Verily, there were giants in the land in those days. Sir Thomas Call, Bart. was the first Treasurer of the Board; and Mr Arthur Young, the well-known writer on husbandry, and editor of the Annals of Agriculture, was, on the recommendation of his friend the President, appointed its Secretary.

On the first day of the Board being assembled, Sir John, as President, opened the business by an address. He commenced by saying, that, although in other countries attempts of a similar nature had been made on a humbler scale, yet, that he believed the present was the first instance of such an institution being invested with the privileges and consequent patronage of a public establishment. After adverting to the circumstance of his Majesty being pleased to nominate himself as President, simply from the circumstance of his having been the person who moved for such an institution in Parliament, he confessed that he would never have made such a motion had he not been fully aware of the importance of the subject, or without having previously sketched in his own mind the system which might be most usefully pursued. That, having carried on, for several years, correspondence with no less than 1500 individuals on the subject of British wool, and minutely examined into the political state of Scotland, he had thus gained no inconsiderable experience as to ascertaining the leading principles which should guide their present plans. In the first place, he thought there existed in these

kingdoms a fund of ability, information, and capital nowhere else to be found in the world; and that the calling forth of that ability, collecting that information, and giving that capital a proper direction in increasing internal wealth and cultivation, would essentially add to the national prosperity. In the second place, he was satisfied that the Board would be able to prevail on active and intelligent husbandmen to follow any system that would contribute to the public good, and did not materially interfere with their own interests. In the third place, that nothing can resist industry and perseverance properly directed, and that he doubted not their exertions would cause many millions of acres, then defectively cultivated, to be greatly more productive; bring many millions of acres, then lying waste, into cultivation, and at least double the stock of the kingdom in value. Sir John then went on to say, that their first object should be to ascertain facts, and that, for this purpose, an examination of the agricultural state of the different counties was essentially necessary. That the immense mass of information thus accumulated would answer two purposes; it would point out where legislative measures could assist agricultural improvements, and it would instruct individuals,—the landlord to manage his property, and the tenant to cultivate his fields. In conclusion, he added, that Parliament might be of essential use to husbandry in two ways, —by removing discouragements, and by holding forth encouragements;—that the instruction of individuals would be greatly furthered by the information which the Board could not fail to accumulate, alike by foreign and domestic correspondence; that the most advantageous connection between landlord and tenant would be thus ascertained; and that, if the measures he had hinted at, and others which he would yet venture to suggest, were approved of, and followed out with alacrity and zeal, he was willing to dedicate his whole time and exertions to their accomplishment, fully satisfied that no pursuits could be productive of more gratification for the present, or heartfelt satisfaction for the future.

Shortly after the establishment of the Board, its attention was directed to the formation of necessary bye-laws, by which its future proceedings were to be regulated, and the original sketch of these was drawn up with much attention and ability by Lord

Hawke, to whose assiduous zeal the establishment at this time was much indebted. A variety of important communications, on topics generally connected with agricultural inquiry, was transmitted both from home and abroad, some of which were printed separately, and others destined to be incorporated with the reports of the Board. The Committee, which had been appointed to take into consideration the state of the waste lands and common fields of the kingdom, proceeded spiritedly with their investigations, in which they were greatly assisted by Mr Robinson, the Surveyor-General of Woods and Forests; and, above all, great progress was made in the general agricultural survey, which was to form the grand basis of all their future proceedings and deliberations. Surveyors had been assigned to the different districts, each of whom was to give in his separate report. In an incredibly short time, no less than seventy-four reports of great value were presented; and, within a twelvemonth from the establishment of the Board, nearly the whole survey was completed. No less than 80,000 copies of papers on agricultural topics had been circulated, and a taste for the subject was generated and fostered, as was apparent from the increased demand for all works connected with rural affairs. The Reports, after being given in and printed, were distributed among such as were supposed competent to add or to correct, and a great fund of information was thus obtained in the shape of marginal annotations.

At the next general meeting, held on 14th July 1795, the President announced, that not only had the rough draughts of the survey of each county been printed, but that the reprinting had commenced, from which it would be apparent what progress had been made in collecting additional information. During the same session of Parliament, a bill was brought in by Mr Gorys, having first been recommended to the attention of the Board by one of its members, Sir Christopher Willoughby, to promote the interests, more especially of the lower orders of society, connected with husbandry,* by enabling them to lay out their little pittance to the best advantage for their families. By the recommendation of the Board, a sum was voted in behalf of Mr

* This act was entitled "For the more Effectual Prevention of the Use of Defective Weights, and of False and Unequal Balances."

Joseph Elkington, whose improvements in draining were of such boundless advantage to the country, and it was the more honourable to him who received it, as being the first ever voted by Parliament for any important discovery in Agriculture. From the deficiency of the crop of the preceding year, the Board appointed a committee to consider how the evil consequences of such an event could, in the exigency, be best remedied, and by their recommendation 5000 additional acres of potatoes were planted, being in itself a supply of that food adequate for nearly a million of people during six months. For the purpose of increasing the future culture of that valuable esculent, a report was also drawn up and printed, containing all the information which could be collected on the subject, either at home or abroad. A Special Committee was also appointed to take into consideration the situation and circumstances of the lower orders; and, connected with this subject, three points were unanimously agreed to, an improved construction of cottages, whereby the consumption of fuel might be diminished; the annexing of a considerable garden to each, by which means the labourer might be enabled, with the assistance of his family, to raise a considerable quantity of provisions without going to market; and the encouraging of Friendly Societies, those most felicitous of all institutions for benefiting the condition of the poor.*

Passing over a multitude of minor subjects, each useful in itself, which occupied the attention of the Board of Agriculture, certainly the drawing up of the reports, in which were detailed the agricultural and political state of the several counties of the kingdom, was of by far the greatest importance. For not only do they contain the best information on subjects merely agricultural, but in connection, we have every thing we could wish in the different departments of general knowledge of civil and ecclesiastical history, and of political economy.†

* *Vide* Sir John Sinclair's Address to the Board, an. 1795. Appendix to an Account of the Origin of the Board of Agriculture, prefixed to vol. 1st of [illegible] 4to 1804.

† From a conviction of the utility of such an undertaking, the late Emperor Alexander of Russia, at the expense of L.7000, accomplished a survey of [illegible] the smallest provinces of his immense dominions, under the direction

Although connected in point of time with a subsequent era in the agricultural life of Sir John Sinclair, yet, in connection with what has been just said, it may not be out of place to mention here, that, principally by his indefatigable exertions, the survey of the whole of Great Britain was twice gone over; and the second time, according to a regular system. When we mention that this, the second survey, comprehended the publication of seventy octavo volumes, we need neither say that the task was appalling in its contemplation, nor was its accomplishment less than herculean.

As connected with the establishment of the Board of Agriculture, we may be permitted to extract the following passage from Dr Bisset's History of the reign of George III. "Agriculture," says that writer, "has never occupied a share of legislative attention proportioned to its momentous value, as a branch of political economy, since Britain became so eminent for manufactures and commerce. This is an omission, the consequences of which have been often fatally experienced, from recurring scarcities in a country, by the fertility of its soil, and the talents of its people, so adapted for securing plenty. An evil so frequent was naturally the subject of reiterated complaint; but no effectual means were employed to prevent it from often occurring again. Among the many ardent inquiries into political economy, one of the most active and indefatigable, whom an age supremely addicted to such studies has produced, is Sir John Sinclair. This gentleman, of a vigorous and acute understanding, enriched with knowledge and methodized by erudition, had bestowed great industry of research on various branches of political philosophy. He had traced, investigated, and presented to the public, the history of the revenue. In the progress of his pursuits, agriculture presented itself to him as an object most deserving of promotion. He saw that very much remained to be done; but before he could set about propositions of improvement, he thought it wisest and most expedient to ascertain the facts; and therefore sought information where useful information was most likely to be found. In Scotland, his native

of one of the surveyors of the Board of Agriculture. Napoleon with more energy, and a deeper sense of the importance of such a subject, did not stop until reports had been given in from all parts of the French empire.

country, he applied himself to the clergy, the best informed of any class of men of fixed rural residence, and addressed certain queries to the members of that numerous and respectable body. These queries, embracing the physical, moral, religious, and political situation of the respective parishes, in the result of the answers, produced an immense body of statistical knowledge, especially on pastoral and agricultural subjects. He afterwards less systematically and extensively executed, through different means, a similar plan in England. He advanced, however, so far as to ascertain a general fact of the very highest importance; that though, in some particular districts, improved methods of cultivating the soil are practised, yet, in the greater part of these kingdoms, the principles of agriculture are not yet sufficiently understood, nor are the implements of husbandry, or the stock of the farmer, brought to that perfection of which they are capable. To promote so desirable a purpose, Sir John Sinclair projected the establishment of "*A Board of Agriculture*," to be composed of gentlemen perfectly acquainted with the subject, and considerably interested in the success of the scheme, and who should act without any reward or emolument. An address was proposed to the King, praying him to take into his royal consideration the advantage that might accrue from such an institution. His Majesty directing the establishment of the Board, the Commons voted the necessary sums for defraying the expenses; and the Board of Agriculture was accordingly established. *

It may readily be supposed, that these patriotic exertions were not unattended with great pecuniary expense to their originator. The sum of L. 3000 per annum was infinitely too small for so extensive a purpose as the promotion of agricultural and social improvement in an empire like that of Great Britain, where the sources of wealth arising from trade and manufactures were so rich and multiplied. From this poverty of funds the operations of the Board were miserably hampered, and to make all possible saving, it for a long time met in the house of the President. The individual expense thereby incurred was far from inconsiderable, to which was superadded that attendant on meetings in distant counties, which it behoved Sir John to be

* History of the Reign of George III. vol. v. p. 367.

present at, as well as his expected subscriptions to all plans which had the promotion of agriculture for their ostensible object.*

Yet extensive as were these schemes of social improvement, and absorbed as Sir John Sinclair seemed in their accomplishment, he could find leisure for other duties, which arose out of the exigencies of the times. In the year 1794, when the wars of the French Revolution were involving Europe, and threatening the overthrow of every time-hallowed institution, Mr Pitt suggested, in the course of a conversation, that, as his estates lay in the north of Scotland, the inhabitants of which were attached to military pursuits, he would perhaps not object to raising a regiment of fencibles, the command of which might either devolve upon himself, or whatever relation or friend he might nominate. Sir John answered, "that he had never contemplated being a soldier, but as the public service required such exertions as he had mentioned, he would not hesitate a moment to enter into the plan proposed; and, instead of restricting the service to Scotland, which had hitherto been the case in regard to fencible corps, would at once agree to raise a battalion for the service of Great Britain. The minister was much pleased with this patriotic proposal, and no time was lost in procuring a letter of service, which was dated 7th March 1794. The regiment was speedily completed, and this first corps of British fencibles,—for originally the service was restricted to Scotland—was inspected at Inverness in October of the same year, by General Sir Hector Munro. Being clothed in the Highland costume, the appearance of the corps was highly military and imposing, a circumstance which certainly was not lessened by nineteen of the officers being above six feet in stature.† Government having subsequently resolved to disband all the fencible troops whose

* In a letter to Sir John Sinclair, which Dr Watson, the Bishop of Llandaff, has published in his Anecdotes of his Own Life (4to. 1818, p. 333.) that distinguished man says, "I admire that activity of mind which is incessantly prompting you to exertions for the public good." Both play and pay, however, were to Sir John's cost.

† The Highlanders in the town and neighbourhood of Inverness were thence led to give them the appellation of the "*Thier-nan-more*" or "the Great Chiefs." Vide Correspondence, vol. i. p. 206.

services were limited to Great Britain, this battalion was of course included in the number; and, being at Newcastle when this order was issued, were thence marched, accordingly, for the purpose of being disbanded, to Edinburgh.

In the spring of the following year Sir John raised his second battalion of fencibles for the service in Ireland, to the north of which kingdom it was ordered, and where it remained for two years. This battalion was augmented to a thousand men. Such was the general attention paid to their appearance and health, that Lord Lake, after reviewing them at Cork, declared, that "although he had often heard before of a regiment of a thousand men, he had never seen one till that day." In consequence of the corps being so complete, Sir John was enabled to part with not fewer than 220 volunteers for the Egyptian expedition—no regiment of a similar description having ever furnished so great a number. The regiment was also so particularly distinguished for its discipline and excellent behaviour, that the magistrates of the county of Armagh, of whom Lord Gosford was chairman, unanimously voted an address to Lieutenant-Colonel Frazer, then in their command, an example which was afterwards followed by the inhabitants of the town of Middleton, couched in terms which were, if possible, still more gratifying and energetic.

The state of health in which this corps was kept is a very extraordinary circumstance, and well merits commemoration. Out of a body of one thousand men, officers included, the deaths in seven years amounted only to two of the latter and thirty-seven non-commissioned officers and privates—a mortality of less than three-fourths per man in every hundred annually; and when the first battalion, consisting of six hundred men, were disbanded, as we have mentioned, at Edinburgh, there was not only not a sick man in the hospital, but every individual belonging to it, without a single exception, appeared on the field to deliver up his arms.

It may readily be conceived, that Sir John Sinclair could only occasionally devote himself to military pursuits, both from his Parliamentary duties and his presidency over the Board of Agriculture, a great part of whose business he personally performed; yet, having been appointed to take the command of a camp, esta-

blished in 1795 for the purpose of defending the city of Aberdeen from the attack threatened upon it from the coast of Holland, he was thence led from the circumstances in which he found himself, and in accordance with that sleepless zeal which actuated him for the good of mankind, to pay more attention than he is likely otherwise to have done to the minutiæ of military life. He accordingly took the state of that camp as ground matter for a tract, in which he enlarged, from the particulars before him, upon the principles which ought to regulate encampments in general.

In this tract he threw out a variety of judicious observations on the diet and health of the soldiers, on the smoking of tobacco under particular circumstances, and on dress. Sir John strongly recommended the bell tent, and suggested ventilating holes in the central pole, which, at the top, might be made larger for that special purpose. He considered entrenched camps as the best school for military education,—not only as a more rigid discipline can be kept up there than in common quarters, and that the men are more under command, but because the ditches drain the ground on which it is situated, and the mound affords excellent shelter in boisterous weather.

In connection with this subject we must briefly mention, that Sir John Sinclair suggested various improvements in the form of the musquet. He recommended only one pipe in the stock of the ram-rod, by which the stock would be strengthened, and injury to the hand from the ramrod, when loading, prevented. Also, that there should be a sight in the stock, for enabling the eye to catch objects; that the ramrod should be of equal thickness at both ends, to do away with the necessity of double turning in loading, and that it should be placed at the side opposite to the lock, because this would be nearer the soldier and farther from the bayonet.*

* Sir John Sinclair happening once to dine in company with Mr Wilkie, the painter, that distinguished artist was asked, in the course of conversation, if any particular circumstances had led him to adopt his profession. Sir John inquired, "Had your father, mother, or any of your relations a turn for painting? or what led you to follow that art?" To which Mr Wilkie replied, "The truth is, Sir John, that you made me a painter." "How, I!" exclaimed the Baronet, "I never had the pleasure of meeting you before." Mr Wilkie then gave the following explanation:—"When you were drawing

During the year 1796 the Board of Agriculture greatly extended its correspondence, notwithstanding the right of franking letters having been denied to its members, and all its operations were carried on with great vigour, although the annual government sum allowed was by far too little for the extensive objects in contemplation. From the high price of corn consequent on the failure of the crops in the preceding season, a select Committee was appointed, under the name of the Corn Committee, to take the subject into serious consideration; and, by the measures they recommended, the prices of grain considerably abated. These were, economization in the consumption of bread, using other varieties of grain as substitutes for wheat, and encouraging, by large bounties, the importation of foreign corn. To prevent the risk of a future scarcity, Sir John Sinclair, acting in the name of the Board, moved in Parliament for the appointment of a select committee to take into consideration the means of promoting the cultivation and improvement of the waste, unenclosed, and unproductive lands of the kingdom. To accomplish this grand purpose, a general bill of inclosure was recommended, and its value and necessity strongly urged; but the difficulties attending this scheme, and the opposition it so strenuously met with, rendered its pursuance at this time abortive.

A bill was, however, passed for allowing the importation of linseed or oil-cake and rape cakes from any foreign country in vessels built in Britain, without payment of duty. At the time this act was made, these two articles were little known in husbandry. The former was mentioned as a refuse, collected in the manufacture of linseed-oil, which was said to have been used in America for the feeding of cattle; and the latter, as a ma-

up the Statistical Account of Scotland, my father, who was a clergyman in Fife, had much correspondence with you respecting his parish, in the course of which you sent him a coloured drawing of a soldier, in the uniform of your Highland Fencible Regiment. I was so delighted with the sight, that I was constantly drawing copies of it, and thus insensibly was transformed into a painter."

What great results may be traced to small causes! The falling of apples from a tree is said to have suggested to Newton the theory of gravitation, and to the tones of a Welsh harp we owe "The Bard" of Gray. Who could have attributed the dawning of the matchless genius which created the Pitlessie Fair, the Rent Day, the Chelsea Pensioners, and other glories of British art, to an original circumstance so trifling in itself as the copying of a coloured print!

nure, which had been tried in several parts of the kingdom with advantage, and of which it was supposed that considerable quantities might be obtained from the continent of Europe. It seems to have been little dreamt of at the time, that importation was to be made to a tithe of the extent which it has reached of late years, or that it was ever to form such an extensive article of commerce.

So great was the number of communications transmitted to the Board on the subjects of farm-buildings, cottages, state of the poor, embankments, roads, and construction of mills, and some of them of such value, that it was resolved to publish a selection in a quarto volume. This was accordingly done in 1797, and was entitled, "Communications to the Board of Agriculture on Subjects relative to Husbandry and Internal Improvements." It was afterwards added to, from time to time, and a second edition appeared in 1804, in seven volumes quarto, with a great variety of plates and illustrations.

Although legislative sanction and countenance had been from the first given to the Board of Agriculture, yet the late Lord Melville assured Sir John Sinclair afterwards, that Mr Pitt and himself were at the time the only two members of the cabinet who had favourable ideas of the scheme; and that it was not without great difficulty that they managed to procure for it any ministerial countenance in the Lower House.

It would be foreign to the purpose of the present memoir, which is intended to shew the benefits which Sir John Sinclair has conferred on husbandry, to more than allude to the many subjects of collateral interest which, at various periods, occupied his ever wakeful attention. He had entered Parliament a few months before Mr Pitt; and, from the first, foresaw and foretold the future eminence of that illustrious man. A personal acquaintance was almost immediately brought about between them, through Mr Pitt's brother-in-law Lord Mahon; Sir John having distinguished himself previously by some appearances in the Senate, which indicated him to the embryo premier as a rising member. In the great contest of 1784, Sir John strenuously exerted himself to support him against the opposition of Mr Fox; and, for many years, such were the habits of intimacy subsisting between them, that Sir John had the entré to his

house in Downing Street as if he had been a member of the cabinet. Subsequent occurrences unfortunately combined to render the footing less amicable, yet, through the friendly and patriotic mediation of Lord Melville, then Mr Secretary Dundas, many measures, originating with Sir John, continued to obtain the support of the minister. At his suggestion Mr Pitt, in 1793, proposed to Parliament the issue of Exchequer Bills;* and, by that means, the commercial distress of the country, which was urgent and threatening, to a degree perhaps never experienced during any prior era of our history, was greatly mitigated and relieved; a new impetus was given to trade, and national confidence was restored. On this occasion, as also in the establishment of a similar plan to relieve the merchants trading to Grenada and St Vincent's, who were at the time labouring under peculiarly adverse circumstances, Sir John acted as one of the Commissioners; and, by his exertions and activity, in a great degree, contributed to the success of both schemes.

No measure ever operated with more complete success than the issue of Exchequer bills did, in relieving the commercial distresses of the period; and, to its general scope and bearing Mr Pitt gave his hearty sanction; but, it should be added, that Sir John could not prevail upon him to adopt that part of his proposed system which was to avert similar evils for the future. This proposal was to compel bankers to find security for the issue of notes, and thereby limit the multiplication of such as were payable on demand. From this security not having been given, subsequent distresses ensued, and the crisis of 1797 was brought on, whereby the restriction on cash-payments was forced upon the country. While these circumstances were yet fresh in the public mind, Sir John made another attempt to establish the

* "I was informed by Mr Dundas, to whom I had communicated my intention, 'that unless something definite was previously arranged, the appointment of any Committee, to take up the subject loosely, might produce mischief with very little prospect of good; but that if I had any specific [illegible] to state, Government would be glad to receive them.' In consequence of this hint, I transmitted to Mr Pitt, on the 16th April 1793, my plan for [illegible]ing the commercial credit of the country, and, on the 24th April following, that minister informed me that the plan had been approved of by his Majesty's Government, and that he wished to see me next morning, to fix [illegible] the members who should compose the Committee."—*Correspondence of Sir* [illegible] vol. 2d pages 26 7

system of licensing country bankers, but was again unsuccessful in his endeavours, not of shewing the necessity, for that was clear, but of overcoming the many private interests which were banded together against the attempt.*

Having accomplished the establishment of the Board of Agriculture, Sir John's next favourite project was to secure the passing of "A General Bill of Enclosure.' He had ascertained from the surveys made, that nearly seven millions of acres were shut out from cultivation in England, on the plea that lands held in common could not be subdivided without Parliamentary authority. The expense of obtaining an act for every separate common or field was therefore a check to improvement, which was next to insurmountable. Sir John left no means untried for accomplishing the purpose he had in view, but he found the subject hedged in by obstacles on all sides, which could not be got over. For a little, while appearances were promising, both Mr Pitt and Mr Fox were members of the select committee on the subject, over which Sir John presided, and, with the assistance of some of the ablest lawyers, a general law for promoting enclosures was drawn up, and by care and scrutiny was rendered so unexceptionable, that it passed the House of Commons with little opposition. Had the measure been finally successful, employment would have been given to many thousands of the poorer classes, and the chance of future scarcities materially diminished. But it had a mass of prejudices to contend against, in the shape alike of private interests and stubborn time-rooted prejudices; and, through the exertions of the Lord Chancellor Loughborough, an extinguisher was put upon it in the House of Lords. At a subsequent period, however, under the administration of Lord Sidmouth, Sir John succeeded in carrying through a bill of great importance to the object in view. The discussions on these public measures served also to stimulate general curiosity to an examination of the subject, and the consequence was the bringing in of a multitude of private bills, by which the cultivation of the country was very considerably extended.

* *Vide* "The History of the British Revenue, from the earliest times to the Peace of Amiens, by the Right Honourable Sir John Sinclair." Third edition, vol. ii. pp. 287 and 330.

In a preceding part of this memoir, we mentioned, that, so early as 1783, Sir John Sinclair had acquired considerable reputation as a writer on finance, by a pamphlet which he then published, in opposition to the gloomy views promulgated by Lord Stair, Dr Price, and others. This subject he afterwards followed out in his "Review of the Financial Administration of the Right Honourable William Pitt;" to which an Appendix was added in 1789, and a third part in 1790. In 1803, the whole of Sir John's lucubrations on these and collateral subjects was collected into an elaborate work, in three octavo volumes, under the title of a "History of the Public Revenue of the British Empire, containing an Account of the Public Income and Expenditure, from the remotest periods recorded in history to Michaelmas 1802." This work excited a great deal of attention both at home and abroad; and a third edition of it, corrected and enlarged, appeared in 1804. It formed a kind of text-book for the study of the younger members of both Houses of Parliament, in a particularly interesting department of national policy. Necker bestowed the warmest encomiums upon it, and his opinion was worth something, having both thought and written much on the same subject; and such was the admiration of Mirabeau, that, at one time, he had formed the plan of translating it into French. Marniere of Hamburgh, in his "Essay on Commercial Credit," refers to it again and again, not only as a model of composition in such investigations, but as a standard work, not likely ever to be superseded.*

* "L'Histoire du Revenu Public, et du credit de la Grande Bretagne, par Sir John Sinclair, presente le vaste tableau de toutes les operations de finances, que le Gouvernement Anglois a faites depuis un siecle, dans le genre des emprunts, et dans celui des impositions; et l'auteur en demontre les avantages, on les inconveniens, sans se laisser jamais égarer par des idées systematiques, on des opinions de parti.

"La traduction de cet ouvrage manquoit à la France: il ne suffisoit même pas de la traduire; il etoit necessaire, pour le rendre aussi utile, qu'il doit etre de la continuer jusqu'à ce jour; et Sir John Sinclair, se bornant a presenter des exemples et des leçons de pratique, il falloit encore rapprocher, sous un même coup d'œil, les resultats des diverses operations, dont il donne le detail, et les comparer aux ressources qu'ont employées d'autres nations, pour etablir, sur des bases certaines, les principes de la science des finances, et ne fonder jamais la théorie, que sur l'experience."—*Essai sur le Credit*

We have stated that, in the course of years, circumstances occurred to interfere with the cordial intimacy which had long subsisted between Mr Pitt and Sir John Sinclair; and that the latter found himself obliged to declare a difference of opinion with regard to several points, both of the domestic and foreign policy of the minister; but he never allowed that circumstance to interfere with the high estimate of his talents which he had formed in the abstract, as may be made apparent from a review of that part of his history of the revenue, devoted to the account and examination of his financial administration. Indeed, in another of his works, Sir John has himself summed up the substance of these investigations. "Whether we consider," he says, "in reference to this period, the immense sums levied by the various taxes—the greatness of the public expenditure—the magnitude of the loans borrowed—or the variety of new measures which were brought forward, it is an era which certainly contains more interesting and extraordinary particulars connected with questions of revenue than ever occurred in the annals of any other country, more especially during so short a period; and though, in many respects, the measures which the minister proposed might be questioned, yet it was impossible not to admire the splendid talents that produced them, and the superior powers of eloquence, and dexterity in debate, with which they were defended. Mr Pitt was thus enabled to overcome difficulties, from which most other men would have shrunk."*

To two of the great questions propounded at that time, the income-tax, and the redemption of the land-tax, Sir John paid great attention, and entered on their consideration in Parliament with his accustomed energy and zeal, as may be seen from his speeches on these occasions, printed in the History of the Revenue.† In these, it will be observed, that he was decidedly of opinion that no revenue adequate to the necessities of the

Commercial, considéré comme moyen de Circulation.—Hambourg et à Paris. An. 1801.

* "Correspondence and Reminiscences, vol. i. p. 316."

† *Vide* vol. ii. p. 232 and 266. These speeches were at the time published separately. "Alarm to Landholders; or the consequence of the Bill for the Redemption of the Land Tax," 1798, 8vo. And "Speech on the Bill for imposing a Tax on Income," 1798, 8vo. London.

times could have been raised, without having had recourse to the restriction on the banks, and relieving the nation from the oppression of a metallic currency. On this deeply agitated and still much disputed question, it is not our purpose here to enter —and indeed it would be foreign to the end and aim of this memoir. Suffice it to say, that the views entertained by Sir John on the expediency of banishing metals again from the employment to which, during a less enlightened period, they had been so advantageously directed, and to substitute paper in their stead, were in a great measure supported and strengthened by Mr Ricardo, in his proposals for an economical and secure currency.*

Ample confirmation was, however, given to a great part of Sir John Sinclair's prognostications, when trial was made of a paper circulation in 1797,—that gloomiest and most appalling crisis of our whole national history, when we had rebellion pervading Ireland; a foreign war, in prosecuting which our allies, whose cause we were mainly maintaining, were, one after another, deserting us; the navy in a state of mutiny; the funds sunk beyond all precedent; and even the Bank of England necessitated to crave protection. By the expedient proposed, the nation arose from its threatened ruin, and triumphed ultimately over all its difficulties. A new impetus was imparted to the productive powers of the country, and, instead of a national insolvency, Great Britain was enabled to subsidize all the nations of the Continent. That this resource was found admirably adapted to suit the pressing exigencies of the moment, admits not of doubt—as the plan was proved by the practice. Sir John, however, maintained, that the continuance of the system, with improvements of which it was susceptible, was alone requisite to render this country the greatest and happiest that ever existed;† but the Committees of both Houses, appointed to investigate the subject, were far from being so sanguine, and came to opposite conclusions. It has for the present been accordingly set at rest, although Sir John considered that the following important points have been hitherto left untouched and un-

* *Vide* "Proposals," p. 24.

† Sir John Sinclair's Correspondence, vol. i. p. 317.

investigated,—the expenses of coinage since the Revolution, which, with accumulated interest, would now amount to many millions,—the pecuniary advantages derivable from a paper circulation by taxation of bank-notes,—and the borrowing of large sums from the bank at low interest. He also queried, whether, by drawing gold and silver from other countries, and thereby impoverishing them, we do not in a great measure disable them from purchasing our commodities? Whether, by establishing a paper circulation, we would not derive advantages of inestimable value, through the medium of exchange? And, whether, if a metallic currency was deemed quite necessary, it would not be essentially beneficial to the public that the standard price should be increased, at least in proportion to former augmentations; the high price of the precious metals uniformly tending to national prosperity, by promoting industry, and raising the value of commodities?

As connected with this topic, and before leaving it, we shall briefly give Sir John Sinclair's opinions on another subject of immense national importance, and regarding which public opinion seems to be equally divided,—we allude to the principles which ought to regulate commerce. In opposition to the doctrines of Mr Huskisson and others, who held, that it is for the interest of every country to buy, at the cheapest market, all the goods it requires, and even to give encouragement, on this ground, to the importation of foreign goods, however destructive to our domestic industry, Sir John maintained, that the grand object ought to be the securing a home market for our own people,—to see that our own countrymen were fully employed, well fed, well clothed, well housed, and rendered as comfortable as their circumstances and situations in life admitted of;—to encourage exports, and to discourage the importation from foreign nations of all such goods as can be supplied by home growth or manufacture. Regarding a Nation as a political community, associated together for mutual advantages, he considered it inconsistent with the nature of such a union, that the individuals composing it should be entitled to disregard the general interest, by promoting the industry of countries with which they are quite unconnected. At all events, he considered the general principle of free trade as philosophically incorrect,

unless it was acceded to by all nations without reserve, and the balance be in favour of that which retained its restrictions. Sir John agreed that the system might be applicable to a trading town like Hamburgh; but that, to a nation like Great Britain, which, although extensively engaged in manufactures and commerce, yet certainly derives its chief prosperity from its power to supply itself with food, and other essential articles from its own resources, the application was hazardous in the extreme;—as he considered it an axiom in politics "That no country can be happy at home, or powerful abroad, unless it be independent of other countries for circulation and sustenance."

As a proof that the views of Sir John Sinclair were of the most philanthropic kind, he carried on a correspondence with the leading agriculturists, not only of the Continent of Europe, but even of America; and, from all quarters sought not only to obtain, but in all quarters to disseminate, truly useful knowledge. His principal correspondents in France at this time were M. Tessier, Member of the National Institute for the Sciences and Rural Economy, M. de Lasteyrie, and L. Silvestre, Secretary to the Royal and Central Society of Agriculture; in Prussia, Count Hertsberg, the Ex Prime Minister; in Saxony, Count Detler D'Einsiedel, Director of the Dresden Agricultural Society; and in America, General Washington, Dr Rush, Mr Adams, Mr Jefferson, Mr Jay, and Count Rumford. His correspondence with Washington is peculiarly interesting, and reflects an additional lustre on the memory of that truly great and good man.

It would appear that, in the spring of 1796, Sir John entertained the most gloomy apprehensions of the state of public affairs of Britain, and began to fear,—seeing that the arms of France had spread dismay over the Continent,—that we could not, single-handed, withstand the struggle. The friendship which had originally subsisted between Mr Pitt and him, had, as we have mentioned, from various circumstances cooled down into a mere interchange of civilities: and even then these were at length so far forgotten, that a feeling arose between them, in some degree savouring of personal animosity. Of many parts of the policy then pursued he had great misgivings; and, for a while, he began seriously to think of looking out for an asylum

for his family beyond the Atlantic. With this view he was induced to apply for information to General Washington; and the result was a communication of great value from the latter, concisely detailing the prices of land, degree of cultivation, healthiness, and other advantages or disadvantages of the different States, and concluding with his partiality for the districts which skirt the waters of the Potomac.* The *amor patriæ*, however, at length prevailed; and Sir John determined to abide by the fortunes of his fatherland, whose commercial interests and agricultural prosperity he had so deeply studied, and had so much at heart; in the hopes that the storm might blow past, and that better days might yet shine upon it. Nor were these hopes frustrated. He lived to walk over the plain of Waterloo, after it had been immortalized by the last grand defeat of Napoleon.

We should mention that this passing design of American emigration was entertained, before Sir John Sinclair's suggestion of the issue of Exchequer bills, or the establishment of the Board of Agriculture—measures from both of which the nation derived so much benefit. In 1797, when it was proposed in Parliament to give the subscribers to what was called "the Loyalty Loan," a long annuity of seven and sixpence *per cent.* Sir John successfully opposed the measure, after a first division in its favour had taken place; and thereby caused a saving to the country of more than half a million Sterling.

In 1799, Sir John, actuated by the same unwearied zeal to benefit mankind, however disproportioned in some instances, the means he proposed might seem to the end in view to those of a less ardent temperament, published his "Proposals for establishing a Tontine Society for ascertaining the principles of Agricultural Improvement." We are not aware that the scheme was ever practically adopted.

It is not much to be wondered at, if exertions so varied and extensive as we have enumerated, and unremittingly pursued through a long sequence of years, should at length have shewn their effects on any constitution, however originally free from any taint either of debility or disease. About the year 1797 Sir John began to suffer from the effects of this over-exertion,

* For this curious and valuable document, vide correspondence of Sir John Sinclair, vol. ii. p. 9–15.

which, although they did not shew themselves in any specific form, yet had induced a weak and enervated state of the system; and to his enthusiastic temperament, it was a misery to find, that he was almost unequal to the task of managing his private affairs—pursuing useful inquiries—or following out those political investigations, which the contemporary aspect of civil society seemed to demand. From the decay of his own health, he was led to the consideration of the subject in general, and was much struck in pursuing his statistical observations, by the fact, that so few of the numbers of mankind born, attain any extent of years, even in the healthiest climates; and that, even when life is prolonged, it is to so many, little less than a burden from the embitterments of disease. This led him into a course of reading on the subject, and the result was a pamphlet in quarto, published in 1803, entitled "Hints on Longevity."* In the same year, Sir John collected his Essays on

* The great object of this pamphlet was to point out the path to longevity by shewing the most secure means for the preservation of health—that, being the grand aim in view, and longevity only a necessary consequence. Sir Adam Fergusson of Kilkerran, to whom Sir John had presented a copy, on its publication, seems to have misconstrued this, and imagined that Longevity, considered *per se*, was the object in view. Keeping this in view, we cannot resist quoting part of his letter of thanks to Sir John, as a specimen of spirited and elegant epistolary composition.

"With regard to the subject of the pamphlet," he says, "with which you favoured me, *Longevity*, it is certainly one, which, considered as a point of natural history, is curious in itself, and deserving of investigation. As a political problem, I confess myself not to be sanguine in my hopes, of its even being brought the length of being attended with much practical utility. In the present advanced state of our knowledge of the globe, we have opportunities of seeing man in every stage and condition, from the savage in the wood, to society in its highest state of improvement; and, amidst all that diversity, I have not observed any marked diversity in the duration of human life. In every part of the earth, and from the time of the Patriarch David, to this day, three score and ten years seem to be nearly the limit of active life; and the comparatively few examples of men, who have lived ten, twenty, or even thirty years more, seem only to be such deviations from the usual course of nature, as must be expected in all cases of an average calculation. Besides, how few of these extraordinary circumstances of prolonged life, have been of any consequence to the world, or to the country to which they belonged? Mere existence, of whatever consequence it may be supposed to be to the individual, is of none to the world, if the individual, whose life is so prolonged, can neither, by his bodily labour profit his country, by

miscellaneous subjects, and published them together in an octavo volume. They are on a variety of topics, political, statistical, and agricultural; and, as may be supposed, of different degrees in value and importance.

In the pursuance of his investigations at this time on the subject of Health and Longevity, Sir John was in correspondence with Dr Currie of Liverpool, the distinguished biographer of Robert Burns, and himself a medical writer of high repute; the Chevalier Edelcrantz of Sweden; the Duke of Argyle; and Sir Alexander Ramsay of Balmain, and others.

The improvements in Caithness were at this time occupying also a considerable share of Sir John's attention, and he was in correspondence with Mr Dempster of Dunnichen, on the plan which that gentleman had introduced of sending fish in ice to the London market from the Tay Fisheries *, and on his introduc-

the exertions of his mind improve it, or by the production of children add to its population. If we can quote a Mutius Scævola, who, as I recollect, at the age of ninety, when rendered blind by age, sat in his hall, and gave advice gratis to all who came to consult him upon the civil law, and was called the oracle of Rome, how few instances of extreme old age have been any thing else, than instances of weak impaired infirmity;—how few of any advantage to mankind? But I admit, that if human life can, by any general methods, learned from experience, be prolonged, the presumption is, that the melioration of health will probably accompany it. It is certainly an inquiry, therefore, not to be neglected."

Correspondence of Sir John Sinclair, vol. i. p. 299–300.

* "One day," says Mr Dempster, "about the year 1784 or 1785, Mr Alexander Dalrymple, a faithful servant to the East India Company, and I, were shewn into one of the waiting rooms at the East India House, Leadenhall Street. During our attendance there, among other interesting matters regarding his voyages, Mr Dalrymple told me the coasts of China abounded with snow houses. That the fishers of China carried snow in their boats, and by means thereof, were able, in the heat of summer, to convey fresh sea fish into the very interior parts of China. I took pen and ink, and on the spot wrote an account of this conversation to Mr Richardson, who, as well as others, has been in the practice, ever since, of conveying salmon in ice from the river Tay to London, and from Aberdeen, Montrose, and Inverness, voyages of 300, 600, and 700 miles. In Mr Richardson I found a very grateful correspondent, for soon afterwards I received, on a new year's day, a letter from him, containing a draft on his banker for L. 200, to purchase a piece of plate for Mrs Dempster, and every year since the discovery, one of the finest Tay salmon is conveyed to me monthly, and free from all expense, by that gentleman's order, during the whole of the fishing season." Correspondence, vol. i. p. 300.

tion of the cotton manufactures into the West of Scotland, with the important discoveries which had been made by Arkwright.* He had also the scheme of a company in contemplation, for the planting of waste lands, which he thought would eventually turn out well for the subscribers. A communication to Mr Dempster on this subject has, we fear, not been preserved; but, in answer, the following advice is given. "Your planting project ought to be for 60 or 100 years.† Every solid foot of wood that stands till that time will be worth one shilling. Fifty trees *per acre* at least may stand till that age, and each contain at least fifty solid feet of timber. This, besides all the intermediate profits from thinnings of less age, would yield the company L. 150 per acre, for what may be planted by contract for L. 4 or L. 5."‡ In the mean time, Sir John had the gratification of knowing, that many of the innovations he had introduced into the northern part of the kingdom, were proving sources of national prosperity. Unlimited success had attended the establishment of the British Wool Society, and the value of many properties had been thence raised to a degree never contemplated even by the most sanguine. We have already mentioned that the estate of Langwell, which he himself bought for L. 8000, was sold for L. 40,000. Another which did not yield L. 300 per annum previous to the introduction of sheep, was afterwards sold for L. 50,000; and the estate of Reay, which formerly was let at a rental of from L. 1200 to L. 1500 per annum, brought the enormous price of L. 300,000.

It had been most judiciously determined on, at the establishment of the Board of Agriculture, that political or party feelings should in no instance, or in any degree, be allowed to interfere with the appointment of new members, who were to be selected

* For a most interesting description of the discoveries and improvements in the cotton manufacture, vide Blackwood's Magazine for March 1836. The article is pregnant with the most valuable information on the subject. It also appears that Arkwright was much more indebted to the more original mind of Samuel Crompton than is generally believed.

† See afterwards, a very different opinion expressed on this subject,—and that wood, as a pecuniary speculation, should be cut down every twenty-five years.

‡ Correspondence, vol. i. p. 363.

from amongst the most intelligent proprietors in the principal districts of the kingdom. Sir John was accordingly induced to nominate several eminent characters, whose political tenets differed widely from his own, on account of their known zeal for agricultural improvements. Among these were the Duke of Bedford and Mr Coke of Norfolk. The sheep-shearing festival had succeeded so well in Scotland, and seemed so likely to produce advantageous results, by creating competition on a subject of great rural importance, that both his Grace and Mr Coke, as well as that distinguished patron of husbandry Mr Curwen, resolved to institute similar meetings at Woburn, Holkham, and Workington. At each of these places, these festivals, which were continued for a succession of years, were well attended, and proved eminently useful. The meetings at Holkham were particularly distinguished, not only from the immense numbers who assembled, but from the variety of subjects brought under their consideration.

Taking into view how little comparatively any individual, however zealous and well informed, is able of himself to effect, Sir John was strongly impressed with the idea that the scheme of experimental farms might greatly tend to bring agriculture to comparative perfection. Indeed he regarded the plan as so thoroughly interwoven with the national interests, that the trial should be instituted either solely or at least partly at the public expense. So warm was the interest on this subject created at the time, from the attention which the Agricultural Board had excited with regard to every thing concerning husbandry, that, had not the treaty of Amiens been broken, and war again involved the country, there can be little doubt that the experiment would have been tried on an extensive scale, even by private subscription. There is also reason to believe, from the report made to the National Institute of France on the subject, that it would also have been there carried into effect, had not the same untoward circumstances drawn away public attention from all pacific considerations.

By an order from the French government, M. Otto, the Ambassador in London, applied to Sir John Sinclair for a list of such works relating to Agriculture, as were most likely to pro-

mote the internal improvement of that country; and, in doing so, Sir John took the opportunity of inclosing some copies of his plan for establishing experimental farms, together with some plans of circular cottages, and of a village peculiarly calculated for the accommodation and comfort of artizans in the country. These plans were presented by the Government to the National Institute, which appointed two of its most distinguished members Messieurs Tessier and Cels, to examine and report thereupon, which they did in a manner highly creditable to themselves, and expressive of the most enthusiastic admiration of the exertions which Sir John Sinclair had made in the general cause of humanity.* After entering at length into the details of the scheme proposed, they go on to say, "Instead of making extracts from, we could wish to copy entirely, on account of its utility, Sir John Sinclair's memorial. We think as he does on the subject of rural establishments. We have already declared our opinion in this respect, in this report. Our Government, we ought to hope, in receiving our observations on this head, will not neglect such a source of public prosperity."

In setting forth his plan for experimental farms, Sir John commenced with answering the objections of those who thought that a certain portion of land consecrated to experiments, is not requisite for the advancement of rural economy; and who believed that all which is really useful might be best accomplished by individuals guided by their own enterprise. He shewed that, in the latter way, matters could only be managed on a small, and probably not on a very scientific plan, and might prove, however ingeniously regulated, and in whatever degree successful, extremely hurtful to the pecuniary interests of those who embarked in them. Indeed all agricultural writers of the time, who raised their views from private speculation to look upon agriculture in the light of a science, were at one with Sir John in the matter; and Mr Arthur Young, Mr

* *Vide* "Mémoires presentés à l'Institut des Sciences, Lettres et Arts; par divers Savans. Et lus dans les Assemblées des Sciences Mathematiques et Physiques. Tome Premier. Paris: Bandouin, Imprimeur de l'Institut 1806. The leading article is entitled, "Projet d'un plan, pour etablir des fermes experimentales, et pour fixer les principes des progrès de l'Agricultur: Par Sir John Sinclair, Bart. &c. &c." Lu le 11 Messidor, An. 8.

Marshall, Mr Home, and others, considered it almost indispensable for the progress of a department of useful knowledge which had been grievously neglected as to its proper mode of cultivation, that experimental establishments should be tried in every great department of the empire; by the comparison of whose separate operations, certain fixed principles regarding the practice of husbandry might be obtained.

In the same way, and for nearly the same reasons, Sir John was of opinion that the plantation of waste lands by an association for the purpose, would not only be of national advantage, but would ultimately prove a lucrative speculation to those who engaged in it. The distant prospect of remuneration and profit, more especially when we consider the extent of surface operated upon by the law of entail, must ever in a great measure deter those from planting, who, from the chances of longevity, can see little likelihood of their ever reaping any equivalent reward for their outlay; but this objection has little weight with reference to a society, the members of which, in taking shares, may do so, as a plan of accumulating future capital, less for their individual uses than for the benefit of their families. Sir John proposed that the trees should be sold at the end of thirty years; and, according to his calculations, a most handsome remuneration would be afforded to the shareholders, making all allowances for expenses and the compound interest of capital.

After a minute examination by the French Institute, of Sir John Sinclair's Memoir on Experimental Farms and Planting, a Report was given in to the class by Messieurs Tessier and Cels, and afterwards approved of and signed by Cuvier, the secretary.

1. That conformably to the wish of Sir John Sinclair, the manuscript which he has sent shall be printed; 2. That M. Otto be written to, to thank Sir John Sinclair, M. P. &c. in Britain, for the manuscript which he has sent to the Institute; 3. That a printed copy of this manuscript shall be sent to each of them; and, 4. That the Secretary of Rural Economy shall immediately present to the class a list of the works on rural economy requested by Sir John Sinclair."

That the services of Sir John Sinclair in the cause of humanity were correctly estimated in France, is evident not only by the Report submitted to and approved of by the Institute, but

much more generally, as will be seen by the following extracts, translated from the eleventh number of the *Decade Philosophique, Literaire et Politique*, published in 1800.—"Sir John Sinclair is a man devoted to the public good, and particularly to the prosperity of agriculture. By dint of zeal and perseverance, he obtained the establishment of a Board of Agriculture by the English Parliament, the invaluable works of which will have for their immediate result a Statistical Account of Great Britain, such as no other nation is possessed of.

"Besides the funds appropriated to this purpose by Government, Sir John Sinclair has spent 25,000 francs (L. 1000 Sterling) *per annum* out of his own private income. But his philanthropy does not confine itself to the British isles. He persuaded Washington to adopt agricultural establishments of the same kind in the United States; and he has lately addressed to the National Institute of France, his plan of experimental farms, at the same time expressing his desire that it should be printed under the auspices of that Society."

After detailing the resolutions of the Institute on the subject, the writer thus concludes:—"The object which Sir John Sinclair has in view by experimental farms, is to ascertain useful facts in the progress of agriculture, and to publish them; to throw new light on the subject, and to persuade by example; in short, by such means, the best methods, which are now scattered over the face of the country, like the fertile seeds of flowers, will soon be more generally known and established."

This same plan of Sir John for establishing experimental farms, and erecting cottages on the most advantageous system, having been circulated throughout Germany, Bottiger, one of the most celebrated of the savans of that country, took up the subject in the *Jena Universal Literary Gazette* for June 1801,* and thus expresses himself regarding the plan and its author.

"The annexed plan of a country village is inserted here, chiefly with a view to bring once more to my countrymen's recollection, one of the most active promoters of agriculture, and one of the noblest philanthropists in Europe, Sir John Sinclair, the Scotch baronet, and to erect a durable monument for him

* *Vide* vol. ii. p. 11.

in this Gazette. Our readers are already acquainted with the statesman and economist whose activity is only equalled by the propriety of its objects!" After alluding to the disagreements which had taken place between Mr Pitt and Sir John Sinclair, and of the silly attempts which had been made by political partizans to turn some philanthropic plans of the latter into unmerited ridicule, as well in Germany as in London, M. Bottiger proceeds:—"Let them answer, however, the questions stated in our Agricultural Magazine, No. 5. To whom is Scotland indebted for the attempt to purify her language? Who has exhibited the English finances in the clearest manner, and on the surest basis? Who has erected for Europe a model of statistical information, and carried it the length of twenty volumes, in the face of all difficulties? Who has created a centre for Great Britain's best and dearest interests, her agricultural produce? Who has provided the means of improvement for a chief staple of England, her wool? Who has toiled most earnestly for converting waste lands into fertile fields, and inclosing dreary commons? And who has essentially opposed the inveteracy of bad habits, and the indolence of traditionary customs, even among our farmers? To whom do we owe this and more? All this, we must own, we owe to Sir John Sinclair, and almost to him alone?"

We ought to have mentioned that, in 1795, Sir John drew up, with his own hand, for the Board of Agriculture, an Account of the Northern Districts of Scotland, the counties of Ross, Sutherland, Caithness, Orkney, and Shetland. These original surveys were printed but not published, being only considered as the ground-work for the corrected reports of the several counties of England and Scotland, which were afterwards brought out under the auspices of the Board. Previous to his quitting the Presidency of the Board, these original surveys were completed in ten volumes quarto. These were distributed for marginal annotations,—an immense number of which were received from an unlimited number of individuals, with all of whom it was necessary to carry on a frequent correspondence. We have before mentioned that the work, when completed, comprehended eighty octavo volumes.

There can be adduced no better proof of the celebrity which

these exertions for the good of mankind had attained on the Continent of Europe and in America, even previous to the end of the last century, than the simple enumeration of the diplomas sent to Sir John Sinclair by different societies, who considered themselves alike honouring and honoured by his admission into their ranks. On the 11th January 1787, he was admitted a member of the Royal Society of Agriculture at Paris; on the 4th July 1792, of the Society for the Improvement of Agriculture in Russia; and, on 31st December of the same year, of the Agricultural Society of Zell in Germany. On the 25th of January 1794, he received his diploma from the Royal Academy of Berlin; and, on 23d March of the same year, from the Brandenburgh Economical Society. On the 24th December 1795, he was elected a member of the Dublin Society. On the 26th October 1796, the Royal Society of Stockholm enrolled him among its Fellows; and its example was followed, on the 8th June 1797, by the Florentine Agricultural Society; on the 29th September by the American Society of Arts and Sciences; and, on the 10th October, by the Leipsic Agricultural Society. Sir John was at the same period a member of the Royal Societies of London and Edinburgh, as also of the Antiquarian Society of London, of the Cork Institution, and the Medical Society of Aberdeen.

(*To be concluded in next Number.*)

ON HEDGE-BIRDS, WHICH ARE ALLEGED TO BE MORE OR LESS DESTRUCTIVE TO FIELD OR GARDEN CROPS.

In making a tour in the north of Ireland, towards the Giant's Causeway, about twenty years ago, the want of hedges struck me as a remarkable characteristic of the face of the country, though it did not, as I afterwards found, appear quite so naked in this respect, as the extended corn-fields of Picardy, or the broad and beautiful holms on the Rhine, through which I have journeyed for days together, without seeing the semblance of a field-hedge, to break the sameness of the level landscape, or afford a resting-place for a flight of sparrows, or a nest-nook for a linnet or a chaffinch. On the Continent, indeed, there are

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BIOGRAPHICAL MEMOIR OF THE LATE RIGHT HONOURABLE SIR JOHN SINCLAIR, BART., FOUNDER AND FIRST PRESIDENT OF THE BOARD OF AGRICULTURE, &c. &c. &c.

(Continued from No. 33, p. 38.)

BEFORE proceeding to give an account of Sir John Sinclair's next great undertaking,—the Code of Health and Longevity,—it is necessary to make at least a passing allusion to some of his other labours for the benefit of mankind, towards the close of the last century, or commencement of the present. In an essay like the present, we cannot overlook his exertions to bring into public use the great discoveries in the art of draining land, made by Mr Joseph Elkington, a Warwickshire farmer. Yet, although this system originated with that singular person, he was, in a great measure, unable to give to the world any very connected or distinct account of it; and, to obviate the difficulties arising from that circumstance, Sir John recommended Mr John Johnstone, an intelligent land-surveyor, to the attention of the Board of Agriculture, as a gentleman amply qualified, not only to take plans of his different operations, but to give explanations of them.

Mr Johnstone was accordingly nominated by the Board, to accompany Mr Elkington on a survey of the different drainages he had accomplished in several of the English counties, in order that a proper report might be drawn up of the principles on which his operations were founded, as well as practical details of the mode in which these were executed. The result was the publication of a systematic treatise on the theory and practice

of draining land, which has become of standard influence on the subject of which it treats, and of which three editions have appeared,—the first in 1797, the second in 1801, and the third last year, revised and enriched with so many valuable additions as almost to render it a new work.* In this way a complete account of Elkington's system was communicated to the public, and thousands enabled to put it into practice, who, for want of proper information, might long have remained ignorant alike of its principles, or their importance. To the credit of Sir John Sinclair it should also be told, that when, in 1799, the private affairs of Mr Elkington had fallen into disorder, he endeavoured to procure for him a parliamentary grant of L.1000, in consideration of the benefits which his discoveries had conferred on agriculture. In this, after some exertion, he succeeded, and was in a great means the instrument of relieving the distresses of that ingenious and useful man.

It should also be remembered, that it was at the suggestion of Sir John, that the once overpraised, but now as much undervalued Dr Darwin, the author of the Zoonomia, Botanic Garden, and Temple of Nature, was induced to undertake a work on practical agriculture. Nor can it be denied that the Phytologia, or Philosophy of Agriculture and Gardening,—although, like the lectures of Sir Humphry Davy, of too abstract a description to be of general practical adaptation, abounds with useful observations and ingenious hints, whereof the recommendation of bone-dust as a manure should not be over-

* The reader is particularly recommended to the perusal of Mr Johnstone's work in its improved state, as being the best and most complete work on the subject of draining, which has been yet given to the world. For a more detailed opinion on this subject, we need only refer to the Number of this Journal for September last, in which an attempt has been made to lay its merits before the public.

In a letter to Charles Gordon, Esq., Secretary to the Highland and Agricultural Society, dated January 10. 1835, Sir John Sinclair says, "I am very glad that Mr John Johnstone, land-surveyor, has published another edition of his treatise on draining land. It is by far the best work on that subject that has ever been printed, and does great credit to the author's talents, and extensive knowledge of the subject. I hope, therefore, that the Society will take copies of it, and will recommend it in the strongest manner to the attention, not only of its own members, but also to those societies at home and abroad with whom it is in correspondence."

looked.* It was dedicated to Sir John in the following handsome terms:—"To Sir John Sinclair, President of the Board of Agriculture, by whose unremitted exertions such important improvements have been accomplished in the cultivation of the earth,—that great source of life and felicity! This work, which was begun by his instigation, and forwarded by his encouragement, is dedicated with true respect, by his much obliged and obedient servant."†

From the attention excited both at home and abroad, by his pamphlet on Longevity, as well as from his bias towards codification, Sir John, shortly after this period, began seriously to turn his mind to an extensive work on the general subject of health, in which he proposed to condense into a manageable form, all the widely scattered materials for such an enterprise, to be found in ancient and modern authors.

In a general point of view, Sir John confesses that one of his main incitements to the undertaking was the ascertaining how far it was practicable to condense and systematise human knowledge regarding any particular branch of science.‡ He, accordingly, with his accustomed perseverance and industry, set him-

* The first notice of the employment of bones as a manure was made in Dr Hunter's Georgical Essays (vol. ii. p. 93.), and the discovery is attributed to Anthony St Leger, Esq., a Yorkshire gentleman, so far back as 1766,—another proof how long even the most important and valuable facts may be in arresting public attention. It was afterwards descanted on by Dr Darwin, as we have just mentioned in the Phytologia (*vide* sect. 10.), and is briefly alluded to by Sir Humphry Davy in his Lectures (page 252). To the Doncaster Agricultural Association, however, belongs the merit of having collected the evidence on the subject, and of having decided on the great value of the discovery. This happened so recently as 1828, when the Association appointed a Committee to make inquiries. The Report was published by Ridgway, London, in 1829.

Sir John Sinclair immediately suggested, that the importation of bones should be encouraged by a public bounty, and that some allowance ought to be given to the captains of vessels, who brought home bones as ballast in their ships. For some years past the importation has become too profitable a speculation in commerce to require encouragement.

† *Vide* Phytologia, or the Philosophy of Agriculture and Gardening. 4to. London, 1800.

‡ See Preface to first volume of the Code of Health and Longevity, in 4 vols. 8vo. Edinburgh, 1807.

self to the examination of a vast number of publications on the subject of health and longevity, sifted the chaff of crude remark from the wheat of valuable observation, and opened up a correspondence on the subject with many of the most eminent of his medical cotemporaries both at home and abroad. Among the former we find the names of Baillie, Beddoes, Gregory, Currie, Trotter, and Willan; among the latter Rush of Philadelphia, and Chaptal of Paris.*

To a writer who had so eminently distinguished himself on the subjects of finance and of agriculture, it seemed to many rather a strange hazard to attempt success on the field of medical science, and accordingly the Code of Health was commenced in opposition to the opinion of some of his best and most valued friends. Among others, Mr Arthur Young wrote to him in the following plain terms: "I lament every thing you undertake *out of agriculture and finance;*" but Sir John was determined to persevere, and this resolution was in some measure rendered decisive by a communication from the Chevalier Edelcrantz of Sweden, in which he observes, "that the art of preserving health, and giving longevity to man, *forms a link in that chain of useful pursuits,*" to which Sir John had devoted all his time.

In the first volume of the Code of Health, he digested the fruits of his reading and correspondence, arranging these under general heads, such as diet, air, and exercise; and, in the other volumes, he gave the sentiments of various writers, alike ancient and modern, as well as communications from a variety of quarters made to himself. Three different plans had suggested themselves to him in the writing of his work. The first was to make it an original one, or one consisting entirely of new matter; but this was given up, as the treatise would have been deprived of a great part of its value, by the exclusion of the opinions of many able and intelligent men, who had already thrown light on the subject. The second was, the compiling from these, and adopting their thoughts, without using their language, or acknowledging their authority,—a method at once defective and disingenuous, and accordingly set aside. The third plan, and that adopted, was the consolidating the essence of the know-

* *Vide* Code of Health, vol. ii. Appendix, No. 2. p. 7.

ledge already accumulated, arranging it in a proper form, and using the words and expressions of the original authors, where such could be done with propriety. Seemingly easy as this was in theory, Sir John found the undertaking, in this case, a very difficult one, from the vast field of inquiry he had to travel over, and the dispersion through numberless volumes of the materials, necessarily forming branches of his principal subject.

The grand divisions which Sir John adopted in the treatment of his subject were the following:—1. The circumstances which necessarily tend to promote health and longevity, independent of individual attention, or the observance of particular rules. 2. The rules which, if observed by an individual, have a tendency to preserve health and existence, even when these circumstances are wanting; and, 3. The regulations by which the health and safety of a great community are protected from the various injuries to which they are likely to be exposed. Under the first he comprehended circumstances connected with the person of the individual, as parentage, natural constitution, form, sex, &c. —circumstances connected with the mind of the individual, whether relating to the faculties of the mind, or its passions,—circumstances connected with local residence, as wet or dry atmosphere, high or low situation, hot and cold climate, &c.—and miscellaneous circumstances, as rank in life, education, occupation, connubial connection, and exemption from accidents. Under the second he laid down the rules necessary for the preservation of health, as relating to air, diet, digestion, exercise, and sleep,—being the objects *essential* to man in every situation; as relating to clothing, habitation, amusements, and medicine,—being the articles *highly desirable*, more especially in a state of civilization and refinement; and *as* relating to miscellaneous articles,—as temper, habits, cleanliness, bathing, relief from accidents, and change of residence. In the third grand division, Sir John treated of the regulations necessary for preserving the health of the community, which he considered under the separate heads of the police of climate, of physical education, of diet, of public amusements, of habits and customs, of public institutions; and the police of medicine, comprehending the best methods for preserving the health of soldiers and sailors, and for the prevention of contagious disorders.

In the second volume, Sir John Sinclair gives an account of the ancient authors, who have written on health and longevity, with extracts from their works, illustrating the opinions they entertained regarding these important subjects. A second part contains a catalogue of books, both foreign and British, on these topics, and what more immediately relates to them; and, in the appendix, we have the communications forwarded to the author by his contemporaries. The third volume is dedicated to an examination of the foreign, and the fourth to the British, writers on the subject, with copious extracts from their works.

In looking over these, it must be acknowledged, that we find a great quantity of discrepant materials, and much that might have as well been omitted. But it is obvious that Sir John wished every one to be able to judge for himself, and has amassed together the materials on which his own conclusions have been founded. In this point of view it would have been as well, if the materials of the first had formed those of the concluding volume, as being a general summary of the whole, and as therefore tending less to unhinge the opinions, which are apt to be formed at one time, and unsettled at another by the consecutive opinions of jarring writers.

The first volume, which contains the essence of the work, was translated into German by Professor Sprengel, the celebrated historian of Medicine, and into French by Dr Odier one of the ablest physicians of Switzerland, who highly extols the work for its utility and importance. The translation of Sprengel was from the first edition; but it was subsequently much improved. After celebrating Hufeland's book on Health, Sprengel remarks, "that in the work of the Scottish author many subjects are considered in a new point of view, many new and remarkable facts are introduced; and an anxiety to attain completeness is perceived. To this may be added an advantage peculiar to British authors, that of perspicuity, and exemption from the language of the schools. On the whole," he states, in summing up, "the author has communicated the most important results, which reason, experience, and reading have taught him, regarding the effects of external substances on health."

As we have already mentioned, the Code of Health and Longevity was originally published in four large octavo volumes

—in fact in too expensive a form for very general circulation. In the subsequent editions—and we believe they have amounted to five—Sir John very properly condensed his more important materials into one, and thus rendered his researches much more extensively popular, and consequently important. That he was too sanguine in the results, which he expected from his labours on this subject we believe,—as men will continue oftentimes to err, even with their eyes open towards the high road of truth; but no one can deny the ardour of benevolence, which prompted him to an undertaking, at once so subtile and so laborious. In the Code of Health, he has amassed together a vast quantity of valuable materials, which cannot fail of being useful in themselves, and which have greatly assisted the investigations of subsequent writers on the same or on collateral subjects. It were well if all who have not scrupled to borrow from his mine, had been equally free in confessing their obligations.

Sir John Sinclair thought, and with great propriety, that it might be set down as a maxim in literature, that "knowledge, previous to its being brought into a condensed state, may be compared to a small portion of gold, dispersed throughout a great quantity of ore. In that rude condition, the strongest man cannot sustain its weight, nor convey it to a distance; but when the pure metal is separated from the dross a child may carry it without difficulty." Acting on this principle, he reduced the bulk of the Code of Health and Longevity, as we have just said, from four volumes to one, by condensing its details, and selecting its most valuable materials; and he then proceeded in the same way with the General Reports and the Statistical Account. In his view of the importance, nay necessity of condensation, regarding art and science, implying by condensation the retaining only the more important facts and observations, and passing over those which either are of minor value, or are no longer useful, Sir John is ably borne out by Mr Mill, the historian of India, who remarks, in his preface to that work, "that as no fact is more certain, so none is of more importance, in the science of human nature, than this,—that the powers of observation, in every individual, are exceedingly limited; and that it is only by combining the observations of a number of individuals (or, in other words, forming codes re-

garding each important branch of science), that a competent knowledge of any extensive subject can ever be acquired."

Proceeding in this spirit, Sir John set himself to digest the most valuable materials which had been given to the world on the subject of Agriculture, into one comprehensive volume. The English County Reports had been published in forty-seven octavo volumes, and those of Scotland amounted to thirty more. Seven volumes of communications, besides a number of other works on specific subjects, had also been published by the Board. From these, and from the modern standard works on particular branches of the art, he picked out all the most valuable practical information, and where any topic appeared defective, he made every exertion to render it more perfect, by associating with experienced farmers, surveying their farms, and witnessing their most important operations on the spot. Thus armed, Sir John drew up his Code of Agriculture, the first edition of which was published in 1819. Three editions of it have been since given to the public of this country, besides another in America. It was also translated into the French, German, and Danish languages.

Long previous to this, however, it should be mentioned, that, in a letter to Sir John, Sir Joseph Banks had stated, "that an account of the systems of husbandry adopted in the more improved districts in Scotland, would be of the greatest advantage to the agricultural interests of the United Kingdom; and that it was incumbent upon a native of Scotland, while presiding at the Board of Agriculture, and possessing all the means of information which that situation afforded, to undertake the task. In objection, Sir John argued, that the labour of accomplishing such a task would be very great—that it would be extremely difficult to obtain the necessary information—and that it would afford an opportunity for cavillers to attack the Board on the grounds of its promulgating doctrines which, if acted on, might prove ruinous to many farmers. But all obstacles vanished, when Sir Joseph further urged, "that agriculture has derived, is deriving, and will derive, more benefit from Scottish industry and skill, than has been accumulated since the days when Adam first wielded the spade." This occurred in 1809, but it was not till March 1812, that the whole mass

of materials had been brought together. To do all justice to an undertaking so important, Sir John visited, in person, all those districts which were most celebrated for the cultivation both of strong and of light soils; and he afterwards circulated among the farmers whom he visited, a number of queries on rural subjects, requiring elucidation. By these means an immense mass of valuable matter was accumulated.

When, in 1793, the Board of Agriculture was constituted, the two great objects to which the attention of its members were primarily directed, were the general agricultural state of the country, and the means of improving that state. As the most effectual way of accomplishing this purpose, a number of qualified individuals were employed to draw up the district reports; and, as observed by a distinguished writer on husbandry, "in the course of little more than a year, the Board of Agriculture had printed a body of authentic facts respecting the agricultural and internal economy of this country, greater than was ever obtained by any other nation since the beginning of time." The collection of district reports having been accomplished, the Board went a second time over the same ground, to have these reports consolidated into those of counties, and drawn up on a uniform and systematic plan.

This was the great object to which the attention of Sir John Sinclair was next directed, and in his address to the Board of Agriculture, on the 9th March 1813, he endeavoured to explain the nature and advantages of making extensive inquiries the basis of condensed information. He then added, "that the power and prosperity of a country depend on the diffusion of useful knowledge, can hardly be questioned; and there is probably no art, in regard to which a variety of knowledge is of more essential importance, than in the art of agriculture. The extent of information necessary to bring it to any thing like perfection, is hardly to be credited. To preserve the fertility of the soil,—to free it from superfluous moisture,—to cultivate it to the greatest advantage,—to raise its productions at the least expense,—to procure the best instruments of husbandry,—to select the stock likely to be the most profitable, to feed them in the most judicious manner, and to bring them to the most advantageous markets,—to secure the harvest even in the most

unpropitious seasons,—to separate the grain from the straw with economy and success,—and an endless variety of other particulars, require a degree of knowledge *to do them well*, of no common description."

From being in possession of the Statistical Account of Scotland, as well as of the County Reports, it was resolved to commence with that country, and Sir John, for the more entire completion of the task, associated with himself a committee of inspectors for revising the different great divisions of the work, consisting of Mr Rennie of Phantassie, Mr Robertson of Ladykirk, Mr Low of Woodend, Mr Walker of Wooden, Mr Brown of Markle, Mr Walker of Mellendean, Mr Hunter of Glencarse, and the Rev. Charles Finlater of Newlands.

The grand divisions of this national work consisted of accounts of the geographical state and general circumstances of Scotland—of the landed property in Scotland—of buildings as connected with agriculture—and of the occupation of land in Scotland—together with dissertations on the implements of husbandry—on enclosing land, and the nature and advantages of fencing—and on the management of arable land.

The subsequent divisions of the work are devoted to the other branches of rural economy, after which a view is taken of the political economy of the nation, in which we are furnished with very interesting historical accounts of the various branches of our manufactures and commerce. In the volumes which constitute the Appendix, a vast mine of information is opened up, regarding the civil and ecclesiastical divisions of Scotland.

On the appearance of the work, the Farming Club of Dalkeith, which consists of the principal agriculturists of the Lothians, Sir Joseph Banks, and upwards of fifty of the most eminent practical farmers in the kingdom, wrote to the author in terms of congratulation, and expressing their high estimate of its value.* As a work on the husbandry of Scotland could,

* In an unpublished memorandum, Sir John states, that "the proprietors of land in the Lothians, and other improved districts of Scotland, reaped peculiar advantage from the attention that had been directed to the improvement and management of the soil, by the institution of the Board of Agriculture, an instance of which was given by the celebrated farmer Mr Brown of Markle, in East Lothian, who, in a letter dated 5th January 1813, men-

however, only contain information applicable to districts similar in soil and climate, Sir John was then induced to turn himself to the great object of forming "a Code or Digest of Agriculture," on principles of universal application, and suited to all future times. In this he has amply succeeded, and had Sir John Sinclair bequeathed nothing to posterity save that work, his name must have ever been classed among the signal benefactors to the human race.

The first section of the Code of Agriculture is devoted to the consideration of the preliminary points which a farmer should ascertain before setting himself down to the cultivation of any considerable extent of land, particularly climate, soil, subsoil, elevation, aspect, situation, tenure (whether in property or on lease), rent, assessments on, and size of farm. In the second section, an inquiry is made regarding the means essential to secure niceness in farming, namely, capital, regular accounts, arrangement of agricultural labour, farm servants, labourers in husbandry, live stock, implements, agricultural buildings, command of water, divisions of fields, and farm roads. In the third, the various modes of improving land were pointed out, by cultivating wastes, enclosing, draining, manuring, paring and burning, fallowing, weeding, irrigating, flooding, warping, and embanking land. The fourth section is devoted to the explanation of the various modes of occupying land, in arable culture, in grass (including the dairy husbandry), gardens and orchards, woods and plantations. And the fifth, which concludes the work, is occupied in a general consideration of the means for improving a country, the diffusion of information, the removing of obstacles to improvement, and by positive encouragement. In the body of the work only general principles are discussed, and where minute information is necessary, it is inserted in the form of foot-notes; while points requiring farther explanation or detail have separate papers devoted to them in the appendix. The Code of Agriculture by Sir John Sinclair must ever be regard-

tions, that a farm containing 330 Scotch acres of arable land, was just let for L.2700 per annum, or at L.8, 2s. per Scotch, or L. 6, 10s. per English acre, which he recollects in his early days did not pay above L.300 per annum, while the occupiers were in a poor condition, and scarcely able to pay their landlord, at the usual term."

ed as the standard work on the state of that science—for he has raised it to the dignity of a science, by establishing its principles —especially as referring to the commencement of the nineteenth century. It is a monument honourable alike to his ingenuity, his untired perseverance, and his general philanthropy. His mind was impressed with the belief that the prosperity of the human race in a boundless measure depended on their knowledge of cultivating the soil, or, in other words, increasing the natural limits of subsistence; and he reckoned no labour too assiduous, no obstacle insurmountable, when such an object occupied his generous enthusiasm. That he left many things imperfect is to be supposed; but that he did more than any single individual ever achieved in this great cause cannot be denied.

In the appendix to the Code, Sir John Sinclair has collected together a great mass of valuable materials, directly or indirectly connected with the subject of husbandry, on the size of farms, on leases, on farming accounts, on vegetation, account of the bills of enclosure for forty years prior to and after the establishment of the Board of Agriculture, on the management of an extensive property, on the making of watering-ponds, on the means of improving the condition of the industrious labourers in husbandry, and on other topics interesting to the farmer. We doubt if there exists in any language a view of agricultural knowledge at once so comprehensive and succinct. No greater proof of this can be afforded than the circumstance already mentioned, of the eagerness with which it has been translated into the continental languages, and republished in America. The reception which it every where received must have been highly gratifying to the feelings of the author, and must have afforded no ordinary solace to the old age of so ardent and indefatigable a philanthropist. Monsieur Mathieu Dombasle of Nancy in Loraine, who is perhaps the most distinguished agriculturist in the French dominions, translated it into the language of his country, and as Secretary to the Agricultural Society of Nancy, in transmitting to Sir John the diploma with which they had presented him, he takes the opportunity of saying, "I have been for some time occupied in translating your excellent Code of Agriculture. If any thing can contribute to raise agriculture in France to the rank of a science, which we could not till now pretend to do, it

will certainly be the publication of this work in France, being the most systematic, the most concise, and, in my opinion, the most perfect, which has hitherto been written in any language."* An American writer says, "Sinclair's Code of Agriculture, republished here in 1818, is in very high estimation, and is reckoned the most valuable English work on that subject, and better adapted to all countries than any other;"† and to substantiate the truth of the old proverb, that "what every body says must be true," we conclude these testimonials to its excellence by an extract from a letter from Edward Burroughs, Esq. an eminent agriculturist of Ireland. "Upon the whole," he says, "I consider the Code of Agriculture as the most valuable work I have ever read upon that subject; not only from the important information it contains, but from that information being given under a judicious arrangement, and in a style suited to the most moderate understanding."‡

We have already given, at some length, an account of the origin of that great national establishment the Board of Agriculture; and we have clearly seen, not only that the idea of such an institution originated with Sir John Sinclair, but that he was mainly, almost solely instrumental, in maturing its plans, and carrying these into execution, when formed. The labour and fatigue thus caused, would soon have worn out common zeal, more especially as it was attended, not with emolument, but great annual pecuniary loss. It is also admitted, on all hands, that an enthusiasm inferior to that which Sir John Sinclair evinced, in the cause of the national prosperity generally, and in that of its agriculture in particular, must have allowed the establishment, even after it had been put in operation, to have speedily fallen to pieces, so many ramifications of its interests had to be attended to, and so many individuals consulted. It will scarcely be credited, therefore, that, after Sir John had presided over the Board of Agriculture with so much honour to himself, and with so much benefit to the nation, for a period of five years, an attempt should have been made, and that successfully, to deprive him of the President's chair. We have

* Correspondence of Sir John Sinclair, vol. ii. Appendix, p. 35.

† Ibid, Appendix, p. 35.

‡ Ibid, Appendix, p. 35.

no wish here to investigate into the causes of this transaction, or the ways and means by which it was effected. We fear that, throughout the business, Mr Pitt did not act with his accustomed openness and generosity of disposition, although we can scarcely permit ourselves to suppose, that any political differences of opinion between himself and Sir John should ever have been allowed to actuate his conduct. It is true that Sir John differed with the celebrated minister in opinion, with regard to the trial of Warren Hastings, the Westminster scrutiny, and we believe also the Irish propositions; and it has also been surmised by some, that Mr Pitt was not only a little jealous of his influence and popularity on some important national topics, but considered him too independent in his Parliamentary votes. Be this as it may, there can be little doubt, that, through the exertions of Mr Pitt, an opponent was started against Sir John; and that, through his influence, the opposition was a successful one. Most of the official members of the Board were prevailed upon to attend the election, although they had never taken any part in its proceedings before. The Archbishop of York was an honourable exception, and, although applied to, he would not vote against Sir John. To the great mortification of the regular members, Lord Sommerville, who had been prevailed upon, although it appears very reluctantly, to come forward, was elected,—but only by a majority of one. Sir John himself very kindly apologizes for this not very courteous intrusion on the part of his lordship, by telling us, that Lord Sommerville had been informed, that if he did not come forward, some other candidate would be found, or that the Board would be abolished. No unkindly feeling was generated in the breast of the ex-president regarding his conduct in the matter, nor was it allowed to interfere with the friendly intercourse which had formerly subsisted between them.

To the credit and honour of the Board, be it recorded, however, that the first of its acts, under the new President, was the passing of a vote of thanks to the old, for "his great attention to the duties of his office, and for his great zeal to promote the objects of the institution." A public acknowledgment of services thus publicly rendered, could not fail of being universally considered honourable alike to those who bestowed, and to him

who received it; and it must have been soothing to the feelings of Sir John Sinclair, allowing that they might have been somewhat wounded on the occasion; if added to this general expression of the Board, he received from the first Marquis of Lansdowne, from Warren Hastings, and from Bishop Watson, as well as from its treasurer and secretary, letters expressive of their wonder and indignation at the whole proceeding.

Eight years after this unbecoming and untoward transaction, Sir John Sinclair was again installed in the chair, from which he should have never been unseated; and he continued to hold the situation of President of the Board of Agriculture till 1813, when the vast expense which its management personally involved, and which had considerably impaired his private fortune, obliged him to resign. Lord Macclesfield was President when the Board was finally dissolved, and its papers sent to the Tower of London,—where they may still be seen heaped together in the Record Office, a huge mass of information, which it cost an immensity of human labour and research to accumulate, probably for ever lost to the world.

In 1811, under the administration of Mr Percival, Sir John was appointed Cashier of Excise for Scotland, a situation which he for some time continued to hold. He was then, and thus, obliged to leave Parliament, and was succeeded by his eldest son, the present Sir George, in his seat for Caithness. It should be added, that the emoluments of the situation of Cashier of Excise were greatly reduced at the death of Sir James Grant, the predecessor of Sir John in that office.

Having mentioned the exertions made by Sir John Sinclair to render the discoveries of Elkington of public utility, by having Mr Johnstone appointed by the Board to report on his system, as also to obtain the parliamentary grant for that individual, which rendered his old age comfortable, we must not omit those in behoof of Andrew Meikle, the inventor of the thrashing-machine—unquestionably the most valuable implement introduced into the practice of husbandry during the last hundred years. At the age of ninety-two, he was still alive and in great poverty, and it at once occurred to Sir John, that this opprobrium should instantly be removed by the nobility and landed interest, whom his discoveries had so much benefited. Mr Meik

having been born, and still residing in East Lothian, he addressed a letter to the Earl of Haddington, as Lord-Lieutenant of the county, earnestly recommending the subject to his attention. A general meeting of the proprietors and farmers was accordingly held on the 26th December 1809, and the measure met with unanimous approbation. The sum of L. 1500 was thus raised; and the family of the unpretending old man, whose invention has been of so much benefit to the world, was thus rescued from the necessities which must have otherwise encompassed them for ever. Sir John had also the pleasure of raising a sum of money for the family of Mr Small, who distinguished himself by his improvement on the construction of the Scotch plough.*

Nor was it, as may have been rendered sufficiently obvious in the course of this biographical sketch, only to one department of human knowledge, or to one branch of human improvement, that Sir John confined his speculations or limited his exertions. In the same year that we find him generously arousing merited sympathy for the unprovided old age of Andrew Meikle, we also discover him endeavouring to give a more extended sphere for the genius of a Humphrey Davy. Although to his more early friends Sir Joseph Banks and Mr Davies Gilbert, that distinguished philosopher was no doubt greatly indebted, yet no circumstance tended more to advance his success in life than his connection with the Board of Agriculture, which, while it assisted his pecuniary interests by a fixed salary, proved also the means of bringing him into communication with a number of eminent characters throughout the kingdom. In 1809, Mr Davy submitted a plan to Sir John for the improvement of the Royal Institution, and for rendering it permanent. This he framed into a bill, and undertook to carry through the House of Commons, for which he received the thanks of the managers, through their secretary, Mr Auriol.

In the year following, Sir John Sinclair was elected a privy councillor; and, in his correspondence, we find the following short letter of congratulation:—

* For a very interesting biographical account of James Small, and of his improvements in making instruments of husbandry, *vide* General Report of Scotland, vol. iv. Appendix, p. 352–9.

To the Right Honourable Sir JOHN SINCLAIR, Bart.

MY DEAR SIR, *9th September* 1810.

I congratulate you very sincerely on your being elected one of the Privy Council. It would be a glorious circumstance for our age if this were to be the prelude to an uniform patronage of the public objects of science and useful art,—on which the glory and prosperity of the country must ultimately depend.

I shall prepare for the press my agricultural lectures as speedily as possible. I am, my dear Sir, very truly, with great respect, your obliged and obedient servant, H. DAVY.

Sir John was also congratulated, on the same auspicious event, by others of whom the country has reason to be proud, and who, like Sir Humphrey, looked on the circumstance less as a political honour, than as one conferred for great and useful services to his country in particular, and to the world in general. Among these friends we find Dr Adam Smith, Dempster of Dunnichen, Brown of Markle, Arthur Young, and William Wilberforce.

In the same year, Sir John, as President of the Board of Agriculture, had received some communications from Mr Macadam, then residing at Bristol, regarding the system of road-making then practised, which that gentleman regarded as at once inefficient and expensive. He had himself paid great attention to the subject, and being much struck with Mr Macadam's opinions, in the year following, 1811, he moved for the appointment of a select committee to take into consideration the laws regarding the highways of the kingdom. Of this committee he was appointed chairman; and, having got Mr Macadam's information arranged and condensed, so as to render it more attractive, it was in that shape inserted in the appendix to the report of the committee, where it attracted a great deal of attention from the public. The approbation of Parliamentary authority had no doubt a strong influence over the mind of Mr Macadam, in inducing him to persevere in his pursuits, and to improve on his original plans; and, in 1815, his opinions and theories were put into effectual practice by the Bristol District of Roads, 150 miles in extent, being given over to his charge.

So manifest were the advantages, that, a short time afterwards, the Trustees of the Bath Roads also added their district, of about fifty miles. Almost the entire south of England followed the example set to them; and his improvements have been since adopted over the whole kingdom. The debt which the nation owes to Mr Macadam cannot easily be repaid; and the highways of Great Britain, from Caithness to Cornwall, are at this moment quite unequalled in any quarter of the world.

The beneficial effects of the establishment of the Board of Agriculture in this country, naturally led to a similar measure in various foreign states. In Ireland the same plans for promoting improvement have been adopted; and, by county reports and statistical surveys, a great deal of useful information has been obtained. It must have been exceedingly gratifying to Sir John Sinclair to know that his exertions were estimated in foreign lands; and, as founder of the Board, he received, from associations abroad, a greater number of diplomas than perhaps ever fell to the share of any individual either before or since,—from France, Flanders, Prussia, Austria, Saxony, Wurtemberg, Hanover, Sweden, Denmark, Russia, Italy, and the United States of America, having been presented with not less than a quarter of a hundred of diplomas,—agricultural, literary, and philosophical. *

* The list of these foreign diplomas is as follows:—

1. France, ...	1. The Royal Society of Agriculture at Paris. 2. Dijon Academy of Sciences, &c. 3. The Society of Arts and Sciences at Lisle. 4. Society of La Seine Inferieur at Rouen. 5. Central Society of the Department *Du Nord*. 6. Agricultural Society of Nancy.
2. Flanders, ...	7. Agricultural Society of Ghent.
3. Prussia, ...	8. Royal Academy of Berlin. 9. Brandenburgh Economical Society.
4. Austria, ...	10. Agricultural Society of Vienna. 11. Imperial Royal Agricultural Society of Styria.
5. Saxony, ...	12. Leipsic Agricultural Society.
6. Wurtemberg,	13. Wurtemberg Board of Agriculture.
7. Germany, ...	14. Agricultural Society of Zell.
8. Sweden, ...	15. Royal Society of Stockholm. 16. Academy of Agriculture at Stockholm.
9. Denmark, ...	17. Royal Agricultural Society of Denmark. 18. Literary Society of Iceland.

Early in 1815, Sir John Sinclair was induced to take an excursion to the Netherlands, principally with the purpose of examining into the agricultural state of that country, and of ascertaining the relative prices of grain in Great Britain and the continental corn countries, more especially Flanders and France, the causes of such difference, and the most effectual means of preventing for the future any material variations. He went by Dover and Ostend to Brussels, and thence made a short excursion to Holland, to ascertain the mode of management in the Dutch dairies. While there, intelligence having arrived of Bonaparte's having landed in France from Elba, the commotion excited by that event put it out of his power to carry on the researches which he had intended. He was consequently obliged to limit his inquiries to the state of Flemish agriculture; and, after his return, he threw his observations together in a printed form, in a pamphlet entitled, "Hints on the Agricultural State of the Netherlands compared with that of Great Britain."

In this little work he speculated on the causes of the higher prices of wheat and other grains in England, compared with those in Flanders, which he attributes to the greater expense of cultivation, higher rents, taxes, and public burdens, greater consumption and difference of system. He also collected some valuable information on the means adopted in Flanders for the prevention of the mildew in wheat,—on the advantages of a change of seed,—on the importance of Dutch ashes as a manure,—on the application of rock-salt as a preventive against the rot in sheep,—on the course of cropping favourable to a diminution of fallows,—on weeding,—on winter barley,—on the advantages of flax husbandry,*—on the culture of rape or cole-

10. Russia,	...	19. Imperial Agricultural Society of Moscow. 20. Free Agricultural Society of Russia.
11. Italy,	...	21. Florence Agricultural Society.
12. United States,		22. Historical Society of New York. 23. American Academy of Arts and Sciences. 24. Philadelphia Society of Agriculture.
13. West Indies,		25. Agricultural Society of Santa Cruz.

* At a subsequent period (February 1832), Sir John thought these Hints on the advantages of Flax of such importance, as to entitle them to republication in a separate form. He allows that in England flax is considered to be a scourging crop; but that the best farmers in Flanders contend that it

seed,—on manures,—on double crops in the same years,—and on various other topics interesting to the farmer. In the Appendix, Sir John throws together a variety of observations on the farm-buildings in Flanders, and the expenses of cultivation; together with some valuable information regarding the lace-manufactures of Ghent.

Sir John was also at some pains to collect tables of the average prices of wheat, barley, and oats, in England, for the last half century; and of the same grains in Flanders during the same period, for the purpose of ascertaining whether the practice followed in the latter country, of brewing malt liquor partly with wheat in a mixture with barley, might not be advantageously adopted in this. From the high price of wheat at that period in England, he found that it could not then be tried; but, at a subsequent period, when that price became so low as scarcely to afford a remunerating return to the farmer for the expenses of cultivation, he circulated a printed sheet recommending its adoption. In his investigations on the subject, Sir John learned, that the best proportion for making malt liquors from this comixture of grains, was in using eighty parts of wheat with fifty-two of barley; and that beer thus made is stronger, and keeps much better, than when made from barley alone; but that it is unfit for use for a year, after which it continues to improve for an indefinite time.

In an addendum to the Appendix, Sir John has given the translation of a curious and interesting paper "On the Principal Accidents and Diseases to which Wheat and other Cereal

may be raised once in six years without the least injury to the soil, which in the course of the culture is completely cleared of weeds, and produces a better subsequent crop of wheat or rye than after fallow.

He afterwards adds, "When it is considered that the profit arising from a crop of flax is so much superior in value to the usual produce of grain crops, the high rent that can be afforded, and the great numbers of people that might be employed in all the various branches of the manufacture, one may form an idea of the advantage that may be derived, by a general adoption of this culture. It is quite a mistake to suppose that valuable land is necessary for this crop. Under proper management, light soils would produce it in abundance and perfection, provided the land for the previous crops were properly dunged, and rape-cake sown with the flax."—*Hints on the Advantages of Flax Husbandry and the Linen Manufacture, as practised in Flanders*, p. 3.

Plants are liable, and the means which may be employed to prevent them,"* from the French of Mons. Desmazieres of Lisle. It contains a clear yet concise account of the observations and experiments of M. Tillet, L'Abbe Tessier, and M. Benedict Prevost, all writers whose works have thrown the greatest light on agricultural subjects generally, and on the physiology of vegetables in particular. The diseases treated of are the Smut, the Rust, the Charbon or Mildew, the Spur or Ergot, and the Running,—a term which, when applied *to flowers*, is synonymous with *miscarriage*, and *to fruits* with *not setting*.†

With reference to the observations made by Sir John in the Netherlands, it may be added, that, after the lapse of ten years from the date of his excursion, when the prices of wheat had fallen very low, and the war leases yet remained in operation, he considered the extinction of the malt tax as indispensably necessary, not only as regarded barley, but also wheat lands, for the commercial prosperity of the agriculturist. To supply any deficiency which such a plan would occasion, Sir John suggested the conversion of the four millions and a half of temporary annuities into perpetual stock.

We may here mention, that Sir John Sinclair, in the course of his life, made five visits to the Continent. We have already

* "Agrostographie des Departemens du Nord de la France. Par J. B. H. J. Desmazieres. Lisle, 1812."

† From the section on Smut we extract the following anecdote, less, perhaps, from its value than from its graphic character. It is quoted from "*Le Cours complet d'Agriculture.*"

"A farmer, on working the lands of a rich commondery at Malta, was found by M. Herdouin, sitting on a sack of seed. It was on a beautiful day, the sun shining brilliantly, and not a cloud to be seen. M. Herdouin went up to him, and asked him why he was not sowing? "Because the land is ill," said the labourer. "What is the matter with it?" replied M. Herdouin. "It sweats (said the other); stoop down, and you will see a cold vapour coming from it. I am sixty years old, and this was pointed out to me by my father. I shall wait, or else I shall have black wheat." He considered this transpiration as having an influence upon the seed, if sown during its occurrence. This labourer added, that in the preceding year there had only been two days proper for sowing, and that the harvest was most abundant, while the part of the field which was sown in unfavourable weather produced a prodigious quantity of smutted corn."

alluded to his tour to the south of France in 1775, along with his younger brother; his journey to Paris towards the end of 1785, in which he made the personal friendship of Buffon, and Necker, and entered upon an agricultural correspondence with the Count d'Hauterive, M. Dombasle, De Marniere, Tessier, Sylvestre, and De Lasteyrie; and his more extended travel through the northern countries of Europe in 1786, in which he so extensively enlarged the circle of his distinguished acquaintances, and also the sphere of his personal observations. In 1814, he made the excursion to the Netherlands, during which he collected materials for the agricultural work on that country, which we have just noticed; and in 1815, he again revisited these provinces, and France, soon after the battle of Waterloo.

The agricultural observations, which Sir John made on the state of France in 1816, may be summed up in a few words. He found it, generally speaking, in a very deficient state; and, from many circumstances, thought it much more likely to degenerate than to improve. In the large farms of Picardy, he observed four horses in a plough, so that some farmers, with fifty horses, had only fifteen ploughs in operation. All the ground in that province was cultivated; but, in the opinion of Sir John, more corn would have been raised if they had ploughed one-third less ground. Their climate is said to be too dry for turnip crop; and their sheep are comparatively few in number: the Merino breed, which had been introduced, were skilfully managed, and greatly esteemed among the agriculturists. From the law instituted during the Republic, and, we believe, not yet repealed, by which possessions are, at the death of the parent, equally divided among his children, Sir John was decidedly of opinion, that agriculture was materially injured; as the proprietors were thus apt to be reduced to a state of indigence, and in their distresses involved the farmer,—thus taking away any little capital which might be useful in rural improvements.

The sudden change in the state of the country, which followed the termination of a war of such long standing produced consequences which plunged tens of thousands into distress; and, on his return from his Continental excursion, Sir John found distress abounding in almost every district throughout Great Britain. Agriculture, trade, and commerce, had each alike been

forced in unnatural channels, and for so long a period, and to so great an extent, that the return to that state which peace and a surplus population necessarily brought, was attended with miseries to vast multitudes, who little expected, and were less prepared, to meet them. With his usual active philanthropy, he accordingly set himself to consider the causes, as also, the most probable cure of this national malady, and, in the October of the same year, 1815, he published a pamphlet, entitled "Thoughts on the Agricultural and Financial State of the Country; and on the means of rescuing the Landed Farming Interests from their present depressed state."*

In this brochure, after taking a view of the dreadful state to which the tenant had been reduced by the return of peace prices, while he was obliged to pay a war rent, the causes of mischief are treated of under three separate heads: scarcity of money, weight of taxation, and foreign importation. Sir John then went on to shew, that the landed interest could not bear their existing burdens, if the circulating medium was diminished, and the prices of produce remained the same; and that a struggle must therefore necessarily ensue, between that and the monied interest, in which either the one or the other would be forced to give way. He then pointed out the absurdity of permitting the produce of foreign harvests to interfere with our domestic industry, while that industry was borne down by a load of taxation, which the other escaped; and, that a protecting duty was not alone sufficient to save either the landlord or farmer from ruin. The suggestions which Sir John considered as most available at the time were,—an increase of currency, a bounty on exportation, and public loans for the benefit of the farmer and landlord.

As relating to this period, we cannot resist quoting the following merited eulogium on the character and services of Sir John Sinclair, from the Monthly Magazine for May 1814.

"Sir John Sinclair, after devoting forty years to the service of his country, has resigned his honorary situation of *President of the Board of Agriculture*, and is succeeded by the Earl of Hardwicke. About two years ago he declined, in favour of his son, to become a candidate for his long continued seat in Parlia-

* London, Bulmer and Co.; Edinburgh, Constable and Co. 8vo, p. 16.

ment; and has consequently now retired from public life. On such an occasion, we cannot let pass the opportunity of expressing our regret, that the stern course of nature has thus deprived the country of the active services of one of those men, whose name and character will always be honourably associated with the times in which we live, whose philosophical spirit has accelerated the progress of civilization, and whose labours have tended to improve the social condition of mankind. Of the benefits derived by the country from the exertions of Sir John Sinclair it is impossible to present even a brief enumeration. They are to be found in the extended and improved cultivation of the soil, and in the consequent increase of the means of subsistence; in new and improved roads joining all parts of the empire; in extensive enclosures; in canals; in fisheries; in improved buildings; in useful machinery; and in all branches of the arts of life. Of several of these Sir John has been the successful projector, of others the effective promoter, and of many the zealous patron. Nor has his unwearied industry been limited to the execution of single objects, about which some men employ their entire lives; but his mind has expanded from individuality to the great principles of science and social economy. Our libraries, as long as the language endures, will attest his comprehensive and patriotic views, in the County Surveys of the Board; in the Statistical Account of Scotland; in the Statute Book, and Parliamentary Reports; and in various works on the Revenue, and even on subjects of Health, Longevity, and Polite Literature. If the reign of George III. has been distinguished above that of any sovereign, for the general improvement of the face of his empire, the mind which in a great measure conceived, impelled, and directed this system of improvement, was that of Sir John Sinclair. Yet, this useful man has always been a mark for those bad passions which are engendered by inferior intellects, and the boldness of his plans have so often afforded topics for the exercise of inconsiderate wit, and the declamations of prejudice, that his true character will not be generally understood, till its worth is felt in its loss. The mob of mankind, who are misled by the tinsel of military glory, the superficial glitter of eloquence, or the accumulation of great wealth, are incapable of appreciating the silent effects of social improvements; but we confess, that if it

were in our choice to select the path of glory which wisdom and the better experience of mankind will consecrate, we should prefer the distinctions arising from the useful and unequivocal career of a SINCLAIR, to any renown attached to the splendid achievements of a BUONAPARTE, the fascinating eloquence of a PITT, or the unmeasured wealth of a BARING.*"

We have already endeavoured to shew the anxiety, which Sir John Sinclair on all occasions evinced to do justice to the merits of the living, who deserved well of their country; and to his ardent mind it must have conveyed a gratification as high, as it was disinterested, that his endeavours were in so many instances crowned with all the success he could either wish or anticipate. Efficient services were thus rendered to the families of many yet alive. But his zeal extended far beyond this limited circle, and, in his Code of Health and Longevity, and in others of his works, where the literary services of the long departed are descanted on, we can see the same earnest endeavour to give a fair field to the merits of those, now known to the world only through the medium of the works they have bequeathed to posterity. The enthusiasm of Sir John in the cause of our great Celtic bard, Ossian, above all, must not be overlooked, various circumstances having contributed to impress him with a thorough conviction of the authenticity of the attributed works.

It appears that Mr Macpherson not only left behind him a collection of manuscripts of the original Gaelic poetry, but also a legacy of one thousand pounds to his executor, John Mackenzie, Esq., to defray the expenses of their publication. Arrangements with Messrs Nicol and Bulmer, of London, were accordingly made for that purpose; but after the printing off of the first sheet, Mr Mackenzie unfortunately died. His successor, a gentleman of the medical profession, instead of following out the task, thought it better to let it devolve on the Highland Society of London; and the MSS. were accordingly put into the hands of their secretary. In May 1804, a committee was appointed, consisting of Sir John Macpherson, Sir John Macgregor, John Macarthur, Esq., Portman Square, who took a very active part in the undertaking, Alexander Frazer, Esq., of Lincoln's Inn, the secretary, and Mr Colin Macrae, of the Temple,

* Monthly Magazine, May 1. 1814.

the deputy-secretary of the Society. Of this committee Sir John Sinclair was chosen President.

After much labour, and the overcoming of a variety of obstacles, it was not till 1807 that the work made its appearance in three octavo volumes; and Sir John himself declares, that there was no literary undertaking from the completion of which he ever derived more satisfaction.*

In refutation of the scepticism of the late Dr Samuel Johnson and others, Sir John shews, that it is manifestly unlikely that Mr Macpherson should first have composed the poems of Ossian in English, and while yet wishing to be supposed the author of them, should have taken the trouble of translating them into Gaelic, or that he should afterwards leave a sum of money behind him for the publication of that Gaelic version. Sir John then proceeds to examine the point, whether the Gaelic was not the original, and the English a translation from it, and he thinks, that, on an impartial examination, it will be admitted that in many parts the English translation of Macpherson conveys but a very faint and imperfect idea of the singular beauties of the original. In discussing the question, "Whether that original is not genuine ancient poetry?" Sir John brings forward various circumstances to prove that the Celtic tribes generally were much addicted to poetry,—that various Gaelic poems did exist in the Highlands and Islands of Scotland in remote periods of our history, the greater proportion of which were said to have been composed by Ossian, the son of Fingal,—that various manuscripts, long antecedent to the days of Macpherson, existed, in which these poems were contained; and that a great store of Gaelic poetry, and more particularly of poems ascribed to Ossian, had been handed down from generation to generation by oral tradition.†

* Vide Correspondence, vol. i. p. 330.

† "A gentleman from the Isle of Skye (Captain John Macdonald of Breakish) came to reside," says Sir John, "on my estate in Caithness, who was much distinguished for his knowledge of Gaelic poetry, and who had furnished Mr Macpherson with several of the poems he had translated. Being examined on oath before a magistrate on the 25th September 1805, Captain Macdonald declared, 'That he was then in the 78th year of his age: That when young he could repeat a great many of Ossian's poems of different lengths and

The discussion throughout has been a curious one, but it would be out of place in the present agricultural memoir of Sir John, to enlarge on it here. Suffice it to say, that a great part of the mysticism in which this subject has been involved undoubtedly originated with Mr Macpherson himself, whose pride, like that of Bruce the Abyssinian traveller, would not allow him, when his veracity was disputed, to descend to that defence, which it was assuredly in the power of either to make, and that explanation of circumstances which he could so easily have given.* In the dissertation prefixed to the edition published by the Highland Society, Sir John brings forward two additional circumstances, which put the antiquity of the poems in a much stronger position than they ever before held. One of these is the fact that a manuscript of the Ossianic poems did actually exist at Douay in Flanders previous to the time of Macpherson's publication; and the other, by finding that Swaran and other personages mentioned in these remains have their existence authenticated by the Danish historian, affords not a positive yet a strong collateral evidence of their authenticity. The first book of Fingal, as a specimen of the new translation, was drawn up by Dr Ross, and inserted in the Gaelic edition; and on comparing that with the paraphrase of Macpherson, the celebrated Joanna Baillie remarks, "That it is less pompous, more simple, and more appropriate than the latter; and besides being free from those particular images and forms of expression which

numbers of verses, which he had learned from an old man about eighty years of age: That he was well acquainted with the late Mr James Macpherson: That he had met with him at the Rev. Dr John Macpherson's house in the Isle of Skye: That he had sung many of those poems to him; and that Mr James Macpherson took them down as he repeated them.'"—Correspondence and Reminiscences, vol. i. p. 328.

* The words of Dr Johnson's scepticism are well worth quoting. Samuel asserts, "That the poems of Ossian never existed in any other shape than that which we had seen; that the editor or author never could shew the original, nor could it be shewn by any other; that it was too long to be remembered; that the Gaelic language formerly had nothing written; and that the editor (Macpherson) had doubtless inserted names that circulated in popular stories, and might have translated some wandering ballads, if any could be found; and that the names and some of the images being recollected, make an inaccurate auditor imagine, by the help of Caledonian bigotry, that he had formerly heard the whole."—*Journey to the Hebrides*, p. 205.

in his (Macpherson's) seem to be borrowed from other sources, it presents us with the story, and the images and sentiments that enrich the story, in a more distinct and defined manner, avoiding the great repetition of general epithets, which give to the other, notwithstanding all its beauties, a fatiguing sameness of which many readers have complained. This, I think, must impress the public at large with a belief that the Gaelic copy is the original, and Macpherson's a translation,—a translation, too, by a writer of a different character from the elder poet."*

Mrs Grant of Laggan, a very competent judge of such a matter, writes, after perusing the dissertation drawn up by Sir John, to prove the antiquity of the poems, " Your valuable work has had with me the effect of making ' assurance doubly sure ;' in regard to the Ossianic remains, I hope the clear and complete evidence you have so industriously collected and arranged in lucid order, has confirmed the wavering, and in many instances converted the unbelieving. We Highlanders owe much to you on this score. It was particularly hard that we should be branded as a confederacy united in sanctioning an imposture, and that by those who never took pains to investigate the subject. This you have done in a manner honourable to your own candour, and generous to a class of your fellow-subjects long neglected, and often misrepresented."

Before leaving this subject, we may be permitted to make a few observations on the merits of the Ossianic writings themselves. Such was the despotism, at the time of their publication, exercised by Dr Johnson over English literature, that they were saved from oblivion simply by their intrinsic beauties; whereas, on the Continent, in France, in Germany, and more particularly in Italy, the excellences of the great Celtic bard were at once appreciated and proclaimed. Buonaparte slept with a copy of Ossian under his nightly pillow during his Italian campaigns; and Madame de Stael, in her great work " *De la Litterature*," acknowledges but two distinct descriptions from which all others proceed, one of which had its origin in the south with Homer, and the other in the north with Ossian.†

* Sir John Sinclair's Correspondence, vol. i. p. 333–34.

† " Il existe, ce me semble, deux littératures tout-à-fait distinctes; celle qui vient du midi, et celle qui descend du nord; celle dont Homère est la premiere source, celle dont Ossian est l'origine."

Malcolm Laing, Wordsworth, Moore, and it is to be feared Sir Walter Scott,—for the hits in the Antiquary but too clearly point out his leaning to scepticism,—afterwards ranged themselves under the banners of Samuel Johnson. But admitting that the manner in which Macpherson brought forth his work justly gave rise to doubt in the minds of many, and has since furnished an ample field for hypothetical conjecture and antiquarian research, such circumstances ought to have no weight as to the intrinsic value of the writings themselvss. Ireland's additional plays of Shakspeare attracted notice, solely because they were foisted upon the world as productions of the bard of Avon, and they fell into oblivion, not because they were discovered to be fabrications, but because they were found wanting when weighed in the scales of literary value; while, on the other hand, the writings of Chatterton keep their ground, although every one is aware that they are the compositions of the boy of Bristol, and not of the fictitious Monk Rowley. Age or scarcity can confer no true value on any thing; yet with some they are permitted to do so, whether the trifle be a cracked Roman jug, or a Queen Anne's farthing. Many, accordingly, who believed Ossian to be only an effusion from the pericranium of Macpherson, could content themselves with nothing less than a wholesale condemnation of the poems as a tissue of rant, bombast, and fustian, as if there was no such thing as sterling merit, or as if a standard of poetical excellence could exist only in the fancy of the reader; while, on the other hand, they who felt convinced of his authenticity awarded him no lower a situation in literature than by the side of the Homers, Dantes, Miltons, and Shakspeares. Truth here, as in most other things, seems to lie between. The works of Ossian, in the state they are served up to us, may be considered rather as the raw materials of poetry, than as exhibiting that art, condensation, and selection of ideas and images requisite to form a finished composition. There is a thronging,—a profuse assemblage of lofty and magnificent imagery, seen in the distance, rapidly shifting, shadowy and indistinct; "The glory and the splendour of a dream," united with its obscurity and its perplexing remoteness. We hold not converse with human flesh and blood, but with heroic spectres "who pace about the hills continually," and that come

to us in beckoning silence from the hoar billows of the ocean. There are neither cities, nor civilization, nor society, but the wanderings, the wars of men, and impulses of nature, and passion in its untamed empire. Mossy stones mark out the dwellings of the mighty dead; the wind curls the wave, and swells the sail, and agitates the forest; and the silence of night is broken by gibbering voices, and "airy tongues that syllable men's names on sands and shores, and desert wildernesses." Yet in the narration of the adventures, and in the construction of the fables, a wonderful stretch of invention is exhibited, and a method is visible even in the most irregular and seemingly inconsistent parts, which is not a little surprising. The Epic of Fingal contains some scenes and passages of heroic beauty which would thrill the blood of a coward, and make him long to be a soldier; while the songs of Selma abound in touches of pathos as deep as they are artless.

Sir John Sinclair, after having devoted his labours to the bringing before the public a Code of Agriculture, a Code of Health, a Code of Statistical Philosophy, and the principles of a Code of Finance,* determined on concluding his literary achievements with "A Code or Digest of Religion." A plan of this great work was drawn up so far back as 1819, and the introduction to it was sketched out; but the pressure of cotemporary matters, together with the strong interest which the author took in the currency question, and in the schemes which were in agitation for the protection of agriculture, compelled him to draw away his attention from every other more remote pursuit. We are informed, that, in this introduction to the proposed code, the writer proceeds on the supposition that he had undertaken the instruction of an individual, who was either altogether unacquainted with revealed religion, or who had imbibed very limited or erroneous views concerning it;—indeed, much in the way that the Hon. Mr Ward's truly excellent and ingenious novel of Tremaine is conducted. For this purpose, the pupil is led through a system of progressive instruction.

* There is annexed to the third edition of the History of the Public Revenue of the British Empire, an analysis of the sources of public revenue in general, which is drawn up as the basis or foundation of a "Code of Finance."—Vide *Appendix to Account of Husbandry of Scotland*, p. 98.

He is presented with a general view of human nature, comprehending, first, the corporeal frame, and, secondly, the mental faculties of man—then, with an account of the globe, where the Creator has placed him—then, with that of the heavenly bodies by which the earth is encompassed. Rising from nature up to nature's God, it was next intended, reverentially, to contemplate the being and attributes of Him by whom all things were made, and through whom all things live, and move, and have their existence. It was then intended to inquire whether any revelation of the Divine Will had ever been made to the human race, and, if so, where the best account of that revelation was to be found. It was intended that the work should conclude with an examination and explanation of the precepts and doctrines thus promulgated to man, to guide him in his conduct here, and lead him to the enjoyment of the promised happiness hereafter.

When the sketch of the first portion was completed, Sir John had it printed off, and distributed copies among a few of his more particular and intelligent friends. Among others, two prelates of the English Church expressed themselves in letters to the author, regarding the utility and importance of such a work; and Mrs Hannah More—a name dear to the best and highest interests of the human race—being at the time confined to a sickbed, commissioned a friend to express to the author her high approval of the plan of the work; her full appreciation of the labour and research which such an undertaking would require; and the value of bringing within a manageable compass so large a mass of religious and moral instruction. In short, it appears to us that Sir John has here nearly forestalled the idea of the Bridgewater Treatises, avoiding their only fault, as viewed in a popular light, the want of that condensation, which would have brought the subjects more directly, and in more generalized views, before the reader.

With reference to the same year, 1819, we may mention the circumstance of a printed paper having been circulated by Sir John, "On the superior advantages of the Codean System of knowledge." After alluding to the immense number of volumes which have been published regarding almost every separate branch of art and science, and which many, who feel the am-

bition to be well informed, have neither the ability to purchase, nor the time to peruse; and after pointing out the defects of the encyclopædial system in remedying of this want,—every department of knowledge being divided under a variety of heads, scattered alphabetically through a series of volumes,—he shews the merits of the codean system, where every branch is discussed in its separate and particular volume.

With his usual philanthropic views, which were often, alas! but imperfectly seconded, Sir John suggested that the general peace, then existing, formed a very proper period for making a common effort throughout the countries the most distinguished for scientific and literary acquirement, for ascertaining the state of human knowledge; and, by condensing its more valuable materials, thus lay a sure foundation for future improvement. The conclusion of the paper is curious; and when we consider the number of associations and societies which are now walking in the very footsteps which he here pointed out to them, many who, at this moment, are quite unaware of the fact, will be rendered sensible of the services which Sir John Sinclair has, even in this way, rendered to the cause of science and civilization. "A brief exposition of the advantages that may be derived from the codean system," he says in conclusion, "is thus submitted to the consideration of the reader. The plan may in fact be executed by one man; but a considerable expense, and a combination of talents, are necessary, to go through every subject that ought to be discussed, and so make the system as perfect as it may and ought to be rendered. It is now, however, brought into that state, that the assistance of the liberal, the well-informed, and the public-spirited, will insure its success. For that purpose, it is proposed that an association shall be formed, "*For the Collection and Diffusion of Useful Knowledge.*" The expense to the ordinary members to be £1 per annum, &c. Those who wish to become patrons of the proposed undertaking to subscribe such sums for carrying on the correspondence—for purchasing books—for collecting the necessary information, both at home and abroad—and for the expense of drawing up the several volumes, as, in their judgment, the utility of the measure may seem to merit."

How successfully this plan of Sir John Sinclair has been acted upon, it is needless for us to say.

We have stated, that the great projected work of Sir John Sinclair on the subject of revealed religion was prevented from being carried to a completion, from the controversies at the time fiercely agitated regarding currency and agriculture.

In his History of the Revenue of the British Empire, it will be seen, that, to the former subject, Sir John had devoted profound attention; and it continued at all times as being intimately connected with our national prosperity and happiness, to occupy a great part of his thoughts. When, in 1810, the report of the Bullion Committee was rendered, he reckoned the conclusions to which they had come so dangerous to the national welfare, that he drew up a tract in answer, and, before publication, submitted it to the then premier Mr Percival. The public saw at once, and appreciated the soundness of the views it contained; and it materially assisted in stemming the torrent of delusion which then prevailed, and which, if not arrested, must have curtailed the resources of the country, and disabled Great Britain from contending with the energies of France, at that time bent on the subjugation of Europe. A number of the great merchants of London transmitted to Sir John their acknowledgments of the services he had rendered the nation by his publication, and requested permission to translate it into French for distribution on the Continent; as also, to print an edition of it in English, for the use of our principal commercial cities, and for America.

It was no doubt necessity that compelled Mr Pitt, in 1797, perhaps the most gloomy and appalling era of our whole national history, to make trial of a paper currency; but there can be as little doubt, that the bold experiment then saved Great Britain from ruin and bankruptcy. When specie ceased being paid at the Bank of England, the country, instead of falling into utter misery, as had been so vehemently predicted, rose triumphant over its difficulties, and such a strength was imparted to our productive powers, that we were enabled to subsidize all the nations of Europe at one period, and to resist and conquer them at another. But the death of Mr Pitt, and the

subsequent assassination of his successor Mr Percival, having thrown the reins of government into the hands of the second Lord Liverpool, that nobleman had imbibed from his father the idea, that gold only should be fixed upon as the standard of value—his Lordship having written a book to recommend that system, whose rejection cost him so much disappointment and vexation as to be said to have hastened his death. From hereditary attachment to his father's plan, the son resolved on establishing it; and, in the opinion of Sir John Sinclair, it was the adoption of this system, which brought so many and such frightful subsequent evils upon the country, and, among others, the panic of 1825, by which commerce was reduced almost to a state of barter. He also attributed the diminution of our revenue, and the ruin of our agricultural interests, to the same cause. It also unquestionably tended to the unsettling of men's opinions; and the political convulsions of 1832, whose effects are yet at work, and whose consequences it is still impossible to foresee, may be traced to the same source.

In a preceding part of this memoir, we mentioned the establishment at Edinburgh, in 1791, of the Society for the Improvement of British Wool, and we also gave a short account of the first sheep-shearing festival at Newhalls Inn, near Queensferry, in the following year. It should be added, that, in imitation of it, similar meetings were instituted in Woburn Abbey by the Duke of Bedford, at Holkham by Mr Coke, and at Workington by Mr Curwen. By means of these exhibitions, the first impetus to which was given by Sir John, the art of agriculture excited public attention, and a knowledge of it became fashionable.

These sheep and cattle shows having succeeded so well in various parts of the empire, Sir John Sinclair felt anxious that they should be patronised by the great agricultural association of Scotland, the Highland Society; and he accordingly proposed at a meeting of Directors, in 1821, that the subject should be discussed by a committee of their number. A favourable report having been rendered, the committee recommended that the suggestion should be acted on experimentally for one or more years; and, at same time, submitted a list of the premiums

which, in their estimation, might be with most utility competed for.

The first show took place in Edinburgh on the 26th December 1822, and they were held exclusively there for the four succeeding years, during which time a gradual extension was made of the objects. At first these were confined simply to fed sheep and cattle, but latterly lean and breeding stock were included, roots, seeds, and implements of husbandry. In 1826, the show was held at Glasgow; in 1827, once more at Edinburgh; in 1828, again at Glasgow; in 1829, at Perth; in 1830, at Dumfries; in 1831, at Inverness; in 1832, at Kelso; in 1833, at Stirling; in 1834, at Aberdeen; and in 1835, at Ayr. The meeting for the present year will be celebrated at Perth. On all occasions their success has been complete, and, from the generous encouragement successively held out by the districts more immediately interested in the exhibitions, the premiums have progressively extended both in their amount and in their variety.

Besides the publications already mentioned, most of them in a way little adapted to their plan and magnitude, we have before us on our table no less than thirty pamphlets and tracts, presented by Sir John Sinclair to the world since 1821. Although our limits will only allow us to notice the contents of the three most considerable of these, it may give some faint idea of the indefatigability of Sir John Sinclair's mind to annex the dates and titles of the others.

1. Hints as to the most advantageous mode of managing the Merino Breed of Sheep in Caithness, 1821. 2. Translation of a Letter from Monsieur de Dombasle, President of the Central Agricultural Society of Nancy, to the Right Hon. Sir John Sinclair, 1821. 3. Plan for re-establishing the power and prosperity of the British Empire, by an improved system of Circulation, 1822. 4. On the Corn Laws, and the improvements of which they are susceptible, 1822. 5. Account of the Translation of Sir John Sinclair's Code of Agriculture into French, by M. Mathieu de Dombasle of Metz, by Devilly, 1826. 6. On the importance of Oil as a Manure, 1826. 7. Political Axioms, pointing out the advantages of a Paper Circulation, 1828. 8. Hints regarding the objects of the extensive inquiry that has been carried on into the Culture and Uses of the Potato, 1828.

9. Brief statement of the Corn Question, 1828. 10. Plan for enabling Government to reduce Taxes to the amount of four millions Sterling, 1830. 11. On the means of improving the condition of the industrious Labourers in Husbandry, and effectually relieving their distresses, 1831. 12. Resolutions submitted to the consideration of the Agricultural Classes, 1831. 13. On the extinction of the Malt Tax, 1831. 14. Letter to the Lord Lieutenant of Ireland on the means of alleviating the distresses with which Ireland is now afflicted, and preventing future scarcities, 1831. 15. Thoughts by the Right Hon. Sir John Sinclair regarding his proposed literary labours, written on his birth-day, 1831. 16. On the Corn Laws, and the necessity of protecting the landed and farming interests from the ruin with which they are now threatened, 1832. 17. Letter from the Right Hon. Sir John Sinclair to Thomas Atwood, Esq. of Birmingham, on the Currency question, 1832. 18. Defence of Agriculture, the final effort of an old friend to the cause of British Agriculture, by Sir John Sinclair, in the seventy-ninth year of his age, 1832. 19. Account of the origin of those "Cattle Shows," and other Agricultural Meetings, which have tended to excite a spirit of improvement in England and Scotland, 1833. 20. Plan for preventing the fatal Political Revolution with which we are now threatened, 1833. 21. On the necessity of preserving the Corn Laws, and resisting with spirit and energy any attempt to repeal them, 1833. 22. On Shell Marle as a manure for Turnips, 1833. 23. Hints on Vegetation, the agents necessary for the production of plants, and those which are injurious or destructive to them, 1834. 24. On the destructive consequences that would result from encouraging the importation of Foreign Corn, 1835. 25. Translation of Letter from M. Julien de Paris to Sir John Sinclair, 1835. 26. On the necessity of a total repeal of the Malt Tax, the immense advantages that would result therefrom, and the practicability of the measure proved, 1835. 27. Important hints, earnestly submitted to the consideration of those who are Friends to Agriculture, 1835. An effectual means of restoring the prosperity of the country, by the issuing of small Notes, convertible into silver. This was Sir John Sinclair's last effort in the cause of British prosperity, and we are uncertain whether or not it has

ever been published. The copy before us is proof, and has the manuscript alterations and additions of the venerable author. Those on the penultimate page are so tremulously written as to be almost illegible. The two more elaborate treatises, of which it is incumbent on us to take some notice, are, one "On the Culture and Uses of the Potato;"* and the other, "Thoughts on Currency, and the means of promoting national prosperity by the adoption of an improved Circulation."† We have no doubt that many others (for witness the hiatus from 1822 to 1826), of which we have no copy, as well as a number of communications in the periodical publications, some of which we could enumerate, were the productions of his ever active mind during the same period, which to him, although that of old age, was not that of idleness.

In his treatise on the potato, Sir John Sinclair was at great pains to collect together all the information afloat, both regarding the cultivation and the uses of that admirable esculent. It is well known that the principal objection which has been hitherto urged against the culture of the potato is the great quantity of putrescent manure which it requires. Sir John, however, thought the fact, on inquiry, proved, that, by the addition of salt and gypsum, two-thirds of the quantity of dung previously used will raise, not only as large a crop, but also one of superior quality.‡ Sir John then treats of the conversion of the potato into meal, and on the mode of manufacturing bread by a mixture of potato jelly with wheaten flour. In the various chapters of the work, the history, the varieties, the different modes of culture, the distempers and accidents, the quantity of produce, the expenses of raising, and the various modes of preparing the potato for food, whether for man or the lower animals, are treated of; while, in the appendix to it, a great quan-

* Blackwood; Edinburgh, 1828, pp. 96, 8vo.

† Hatchard and Son; London, 1829, pp. 136, 8vo.

‡ Monsieur Mollerat, an eminent French chemist, found "That the dung of animals promotes the vegetation of the plant *in the stem*, but that gypsum, mixed with the soil, *produces a greater quantity of roots.*"—Traité des Pommes de Terre, par Messrs Payen et Chevalier Paris, 1826.

Mr Weston of Leicester made nearly the same observation in England.—Report on Potatoes, p. 13.

tity of curious and valuable information is massed together regarding its qualities, and their adaptation to useful purposes.

The treatise entitled "Thoughts on Currency," was published in the following year, 1829, and shews alike the flexibility, as well as the industry, of Sir John Sinclair's mind. He sets out with the preliminary maxims, that when a low price of gold is established in this country, and gold is the sole standard of value, it virtually fixes by law a price, equally low, on all commodities, and every species of property; and that foreigners, in particular, will not give us high prices for our productions, if they are enabled to pay for them in gold, fixed by law at a low price. On the other hand, Sir John sets it down, that a high price of gold fixed by law, is a certain means of maintaining our commodities at high prices, greatly to the advantage of the revenue, and of the agricultural, manufacturing, and other productive classes, whose interest it is the paramount duty of every government to promote. He then proceeds to argue, that the maintaining high prices here, if accompanied with a high price of silver or gold, would not prevent our selling British produce and manufactures at low prices on the Continent; because high prices in paper here, would in reality be low prices in a foreign country, with a metallic currency. Thus, if gold be the general medium of exchange among commercial nations, and is worth L.5 with us, it may be sold, without loss, for L.4 on the Continent, producing the same quantity of the common medium of exchange. Sir John then follows out this argument, by stating, that the adoption of a high standard for the precious metals, and depending principally on a paper circulation, leads to a protection of our domestic industry—benefits greatly our export trade—and effectually prevents smuggling of silk and other foreign articles; and he concludes with expressing the belief, that other nations would not be under the necessity, were this system adopted, of enacting those "*hostile tariffs*," as a security for their circulation, by which our commerce is undermined, and shorn of the advantages it would otherwise confer on the nation.

In discussing the subject-matter of his treatise, the author proceeds, in the first place, to consider the nature and advantages of a metallic currency, then those of a paper circulation;

and concludes with explaining the principles of a system, by which the advantages of both, without the disadvantages of either, may be obtained. In short, Sir John thought it incontestibly proved, that it is possible for a rich country to afford high prices for its agricultural and other productions, to give high wages to workmen, and to pay high taxes to government; in short, to be a great and prosperous nation by having a paper currency convertible into the precious metals at a high standard, and without the risk of suffering any loss in its commercial transactions with other nations, or being liable to hostile tariffs.

We had expected to have brought this Memoir of Sir John Sinclair to a conclusion in this number, but even in the very general survey of his life and labours that we have necessarily taken, we find it impossible to do so without extending the present section to a disproportionate length; we must therefore reserve the remainder of our facts and observations till the publication of our next. To those who have followed us thus far with some degree of interest in the history of this great and good man, it will be gratifying to learn, that a life of Sir John, on a scale adequate to its merits, is now in the course of preparation, by his son, the Rev. John Sinclair, A. M. Oxon., F.R.S.E., in which a variety of letters, to and from many of the most distinguished characters of the last half century, will be necessarily included. The work cannot fail, especially in such hands, to prove one of great interest and importance.

(To be concluded in next Number.)

THE

QUARTERLY

JOURNAL OF AGRICULTURE.

BIOGRAPHICAL MEMOIR OF THE LATE RIGHT HONOURABLE SIR JOHN SINCLAIR, BART., FOUNDER AND FIRST PRESIDENT OF THE BOARD OF AGRICULTURE, &c. &c. &c.

(*Concluded from No.* 34, *p.* 149.)

In order to form some appropriate idea of the services rendered to Agriculture in all its branches by the late Sir John Sinclair, it is necessary, as we remarked at the commencement of this memoir, to look back to the state in which he found, and then at that in which he left it. We are not unaware, that several patriotic individuals made great exertions during the last century to improve the produce, and promote the manufactures, of Scotland; and husbandry has ample reason to be proud of her Cockburn of Ormiston *, her Hope of Ran-

* For a very excellent account of the agricultural improvements introduced into Scotland by John Cockburn, Esq. of Ormiston, we are indebted to the New Statistical Account, No. viii. p. 137–9.

"John, the celebrated agriculturist, was born about the year 1685. During the life of his father he sat as a member of the Scottish Parliament, and took an active part in the proceedings connected with the Union of Scotland and England. He afterwards represented the county of Haddington in the British Parliament, and was continued in successive Parliaments from 1707 to 1741. But he was chiefly distinguished by his patriotic and benevolent exertions to promote the improvement of his native country.

"Scotland, though now equally, if not better cultivated than England, was at that time far behind the sister kingdom. Mr Cockburn, from his residence in England, was well acquainted with the agricultural improvements that were going on there. He was anxious to introduce them into Scotland, and spared no labour nor expense to accomplish an object so desirable. The method he employed was a remarkable one. Leases were seldom of longer duration than five years, and proprietors had great difficulty in getting proper tenants to cultivate their lands. Mr Cockburn, with a view to encourage

keilor *, and her Craik of Arbigland,—not to mention several other names of kindred distinction; but the general diffusion of this taste was certainly not very discernible among the prac-

his tenants to greater improvements, granted a lease of thirty-eight years duration, with a renewal of it for nineteen years more at the expiry of that time, and so on from nineteen to nineteen years in all time coming, upon their paying a certain sum as a rent or grassum at the end of every nineteen years. All the farms in the barony of Ormiston were let in the same manner, with some slight modifications. Thus, some are held upon a tenure of three lives; in which case, when one dies, the tenant upon renewing it is bound to pay his grassum. If he do not renew it, and one of the two remaining lives fail, he forfeits his lease. An attempt was made at one time to set aside those leases, but it did not succeed. Some of them, by agreement betwixt the tenants and landlord, or by neglect of the tenants to fulfil the terms, ran out and reverted to the proprietor. About two-thirds of the barony of Ormiston, however, are still held upon those leases.

"At the time the leases were granted, they certainly held out great encouragement to the tenants to improve their lands to the utmost extent of which they were capable; but they were highly detrimental to the proprietor, and now prevent him from carrying on those improvements in the parish to which otherwise he might be disposed. It is impossible, however, to say how much the stimulus thus given might contribute to the general improvement of the agriculture of Scotland at that time."

We should add, that he erected a brewery and distillery at Ormiston, which were carried on by Mr Wight, one of his tenants. He obtained premiums from the Board of Trustees for encouraging the culture of flax, and endowed a school for teaching young girls to spin linen yarn. To complete the process, he established a bleachfield at Ormiston,—the first in that part of the country, and probably the second in Scotland; as, before 1730, fine linens were generally sent to Haarlem to be bleached and dressed.

In 1732, he brought Mr Gordon, a land-surveyor, with him from London, and upon his plan laid out the village of Ormiston and the contiguous fields, which are all still beautifully enclosed with thorn-hedges, interspersed with majestic trees. Mr Cockburn also paid great attention to the public roads, and by his example in laying them out and keeping them in repair, tended n a high degree to influence not only his neighbourhood but the country in general.

In the fifth volume of the Farmers' Magazine, will be found an account of a society of noblemen, gentlemen, and farmers, instituted in 1736 by Mr Cockburn, for discussing, once a month, the most interesting subjects relating to rural and political economy.

About 1741, this distinguished patriot, retiring altogether from public life, devoted himself to the improvements of his patrimonial estates in particular, and of the country generally; and died in 1747, leaving him a name which is still embalmed in the grateful recollection of the barony of Ormiston.

"The Select Transactions of the Honourable the Society of Improvers in the knowledge of Agriculture in Scotland," were printed at Edinburgh in 1743,

tical farmers of the country till the concluding ten years of the last century. In Dickson's Treatise, as well as in several other works systematically dedicated to husbandry as a science, we find a vast fund of admirable observation; but it is astonishing how little such books influenced the management of the practical agriculturist,—who, following the example of his forefathers, continued, in spite of lecture or lesson, to plod round in the same circle of contented and unambitious routine. In this point of view, the information collected by the exertions of Sir John Sinclair in the Statistical Account, were of incalculable value. The various plans suggested by circumstances and situations, as well as by the exertions of individuals in particular districts, were at once brought before the public; and thus a communication opened up, and a spirit of emulation excited, which brought the different sections of the country, as it were, into more immediate contact. In fact, the work operated, intellectually speaking, much in the same way as, in a physical point of view, the laying open new lines of road, and the im-

under the superintendence of Mr Maxwell of Arkland, one of its members. This gentleman, after eulogizing some of the nobility and gentry distinguished for their agricultural zeal, thus introduces Mr Hope:—

"I cannot, without great injustice, omit to remark, and I believe you will all join me, that it has been much owing to Mr Hope of Rankeilor, your preses, that the society was entered into, and that the spirit of it rose so high, and hath been so long supported. His love to his country hath discovered itself remarkably; for he has employed his money, without public encouragement, his time, and prime years, to push husbandry and manufactures forward, and preferred the public good to his private advantage.

"This valuable gentleman, who studied agriculture in England, France, Flanders, Holland, and other countries, and who has been instructing others in the knowledge of it, for a continued tract of more than twenty years, hath, for an example, evidently testified, upon a lease from the city of Edinburgh, what profit and what pleasure, an improvement, prudently designed and carefully executed, may afford. There, where there was once a morass called *Straiton's Loch*, he has raised beautiful hedges and trees, made rich meadows and pleasant walks, where gentlemen and ladies resort; and all around, in imitation of what he hath done, the power or prevalency of his example appears. At this place, now called Hope Park, you ordinarily meet in a society way; that, having the pleasant prospect, and the encouraging precedent in view, your zeal to promote agriculture may be the more excited."—*Dedication*, p. vii–viii.

Besides a variety of valuable papers strictly on husbandry, the Select Transactions contain a great deal of useful information regarding the fisheries and the linen manufacture of Scotland.

provement of old ones, can be shewn to do in extending the resources of a nation. The operations of the Society for the improvement of British wool, and the transportation of the Cheviot breed of sheep into the more northern counties, have also been of incalculable value to the stock-farmer.

In connection with these general matters, we may add, that the first periodical devoted to agriculture, with which we are acquainted, was that conducted by Houghton, in the reign of James II. It was published twice a week, and was continued down to that of Queen Anne, with only some slight interruptions as to the regularity of its appearance. Early in the reign of George III., the *Musæum Rusticum*, and the sheets under the title of *De Re Rustica*, were successively attempted, but severally failed, as much, perhaps, from want of intrinsic merit as of public patronage. At different intervals, Dr Hunter brought out the four volumes of his "Georgical Essays,"—many of which are full of useful hints and practical observations. He contributed largely to the work himself, and he commanded the assistance of a variety of other correspondents. When the publication of these essays was discontinued, Mr Arthur Young, in conjunction with Mr Whyn Baker, the Dublin Society's experimenter in husbandry, made proposals to several respectable booksellers for the commencement of a regular periodical devoted to agricultural subjects. But, although both generously offered their services gratuitously,—the former as a contributor, and the latter as editor,—their negociations were unsuccessful.

It was not till after the termination of the American war, and when the public mind was more prepared for the consideration of such subjects, that Mr Young, in 1782, commenced the Annals of Agriculture, which, continuing to appear at regular monthly intervals for a series of years, constituted during these the principal channel through which the prospects and improvements of husbandry were made known to the public.

At the commencement of the present century, the exertions of Sir John Sinclair had rendered him so conspicuous as well abroad as at home,—he had shewn such a splendid example, not only in the improvement of his patrimonial estates, and in the management of his native county, but in his more compre-

hensive efforts for the prosperity of Great Britain in almost all her relations of manufactures and commerce,—that he stood forth as the undisputed head, and the acknowledged champion, of the agricultural section of the community. Away from all jealous prejudices, and away from all political or party feeling, —known only through the report of his gigantic exertions, and seen only through the medium of his acknowledged publications,— the reputation of Sir John Sinclair soon became thoroughly European. Almost all the scientific societies on the Continent were proud to enrol him among their members, and in the agricultural works of France we find him designated as "*Le Premier Agronome de l'Europe*,"—"*Le Patriarche de l'Agriculture Angloise*,"—"*Le grand Pretre de Ceres*,"—and "*Le Heros de l'Economie Rurale*." That the Board of Agriculture owed its origin to him, and to him alone, is a fact which will not be disputed, and in the very charter of its creation he was nominated by his Sovereign to preside over its deliberations.

It may be interesting to some to learn that Sir John Sinclair came to reside at Edinburgh, soon after his second marriage in 1786. He lived at first in the Canongate, at that time still a fashionable place of resort, and afterwards removed to Charlotte Square, where his family remained till 1814. Sir John himself went regularly to attend his duty in Parliament, and during its recess annually visited his estates in Caithness.

In 1814 he removed with his family to Hare Common, near London, where he purchased a villa, to which he gave the name of Ormby Lodge, and at which some of his financial and agricultural pamphlets are dated; but, before the expiry of the same year, he again sold it, and, returning to Edinburgh, permanently fixed his residence in George Street. He continued, however, to make frequent excursions to London, and visited the metropolis for the last time in 1835, having remained there from May till September. He paid Caithness his farewell visit in 1830, leaving that county in a very different state from that in which he found it, when succeeding to the estates of his ancestors.

While reverting to the evening of Sir John Sinclair's life,

the writer of this Memoir may be allowed to mention the circumstance of his having been honoured with his correspondence in 1832,—a period when the appearance of Asiatic Cholera among us, carried alarm and dismay through every province of the British empire. The opinion of the medical world was then, as it still continues to be, completely divided both as to the causes and the treatment of that disease, while a hundred pens were at work to prove that a hundred theories were true. Such an occurrence was of too great national importance for Sir John to remain an idle spectator; and, with his accustomed alacrity, he circulated a pamphlet "On the Means of preventing the extension of Cholera." In this brochure he first considered the question whether the disease was likely to be localized in this country, and what were the best means for effectually keeping it under, or totally extirpating it. He then enters on the plans for restoring the fluidity of the circulating mass, and for replacing those saline substances, in which the blood of those labouring under Asiatic Cholera is said to be deficient; and he concludes with offering some hints for preventing the appearance of the disease, or mitigating its ravages.

Proceeding on the reports made by Mr Searle to the *Conseil de Medecine* at Moscow, by Dr Stevens of London, as to what has been termed "the saline treatment of cholera," as also on the plan of injecting the normal salts of the blood dissolved in tepid water, as first suggested by Dr O'Shaughnessy, and afterwards practised by Dr Latta of Leith,—Sir John was thence fondly induced to believe, that there was a probability of the disease being prevented, if the blood could be kept in a healthy state, by supplying the system with saline matter,—which might be taken in more than the usual quantity with the food.

A copy of these hints was received by the writer along with the following note.

"Sir John Sinclair presents his compliments to Mr Moir, with the copy of a paper he has sketched out 'on the Cholera,' on which he should be glad to be favoured with any remarks, which may occur to him on its perusal.

It is certainly desirable that all good men should combine

to arrest the progress of a malady, which has committed such ravages amid the human race, and from which hardly any part of the globe is now exempted.

"MELVILLE HOUSE, PORTOBELLO.
10th *August* 1832."

Having, as the results of a too extensive and unfortunate experience, communicated these to the public in two separate pamphlets, the first entitled, "Practical Observations on Malignant Cholera," and the other, "Proofs of the Contagion" of that disease, the writer, in answer to Sir John, referred him to the opinions expressed in these, to which he added some additional facts and observations corroborative of them, which had subsequently occurred to him,—believing then, as he does still, that the predisposing cause of malignant cholera will be found in nervous exhaustion, whether produced by intemperate habits, by scanty nutrition, or by a natural delicacy of constitution, and that, although its remote cause is still in a great measure hidden from us, the disease appears to be solely communicated by human contagion. To this letter Sir John returned the following answer.

"Sir John Sinclair presents his compliments to Mr Moir. Was favoured with his valuable communication, which he will take an early opportunity of deliberately considering. In the interim, Sir John would be glad (if any opportunity should present itself) that Mr Moir would try the effect of water purified by being filtrated through charcoal (as liquid food to those who had contracted the disease), and would endeavour to ascertain how far a deficiency of saline matter in the blood gave the frame a *predisposition* to receive infection, when by any circumstance it came within what may be called the '*vortex of contagion*.'

"PORTOBELLO, *August* 15. 1832."

To the printed paper on cholera, Sir John also added, in the copy before us, some manuscript queries relative to the contagious characteristics of the disease.* In reference to the same

* A curious anecdote, corroborative of Sir John Sinclair's surmises, has been, within the last few weeks, going the round of the newspapers. It relates to the cure of two cases of cholera, by immersion in water from the thermal springs of Carlsbad.

important and interesting subject, Sir John, at this period, carried on a correspondence with various medical authors in different parts of the empire.

The same zeal and enthusiasm, which had animated the youth and maturity of Sir John Sinclair's life, continued unabated to its close. Down to a few days of his departure from among us, he pursued his favourite plans and schemes for the amelioration of human society, kept up his correspondence with the numerous circle of his European acquaintance, and enjoyed the social intercourse of the wise and good. Although no doubt naturally attached to the sayings and doings of other years, yet was he no mere *laudator temporis acti*, and he kept his heart green for the reception of new feelings. He interested himself most warmly on the extension of intercourse by railways and by steam; and years ago projected plans, which, though deemed a little extravagant at the time, are nevertheless, at the present moment, in the act of being carried forward to completion. In his royal correspondence, we pass from the Emperor Joseph of Austria down to King William the Fourth of England;—in his military, from Marshal Romanzoff of the Ukraine down to Field-Marshal the Duke of Wellington;—in his naval, from Lords Keppel and Howe down to Duncan and Nelson;—in his political, from Lord North down to the Marquis of Londonderry;—in his clerical, from Bishop Watson and Dr Price down to Dr Chalmers and Sir Harry Moncrieff;—in his statistical, from Dr Guthrie down to John Pinkerton;—in his agricultural, from the Marquis de la Fayette down to Mr Oliver of Lochend;—and in his literary, we find a succession of brilliant names, from Robertson, Smith, and Blair, down to Scott, Wilson, and Pollok.* Indeed, in the succes-

* Sir John Sinclair's conduct, with regard to Robert Pollok, was quite in accordance with his usual zeal for all that was praise-worthy or excellent. Being much struck with "The Course of Time," he sought out the author's acquaintance, and finding him in extremely delicate health, made application for a clerical situation in India for him, as a probable means of lengthening out his life. As is well known, poor Pollok only survived the publication of his immortal work for a few months, having died at Southampton, while proceeding on an intended journey to the Continent.

The writer of this notice has great pleasure in reflecting on the circumstance of having read the MS. of "The Course of Time" submitted to

sion of letters, which make up the two large volumes of his published correspondence, and which we understand are but a mere sample of the huge mass which has been kept private, the great names which have for the last sixty years illustrated the pages of the world's history, pass, as it were, in phantasmagorial procession before us. From these we see at once, that, although warmly and patriotically attached to his native country, the philanthropy of Sir John Sinclair embraced the whole human race, and that, however separated by temporary political differences, mankind were but a more extended brotherhood.

In the preceding sections of this memoir, we have endeavoured, however imperfectly we may have succeeded, to give an outline of the services, which the late Sir John Sinclair has rendered to the cause of science and literature,—and, in a more especial manner, to the cause of agriculture, which ever appeared, during a career as laborious as it was extended, to form the main study and occupation of his life. From the accumulation of materials, and the long space in mere relation to time, which had to be gone over—the public course of Sir John having commenced as far back as 1775—it has been found impossible, without positively overlooking many prominent features of the subject, to be more brief and sketchy than we have endeavoured to be. This, however, we feel assured of, that every reader of this Journal will agree with us in allowing that we have not wasted time on an unworthy subject, and that few, perhaps no man that ever existed, ever more sincerely and unweariedly devoted themselves, from youth to age, to the great cause of humanity, than he did, whose recent loss Scotland may well deplore.

him, by his inestimable friend the late Mr Blackwood; and of his having recommended its publication to that discriminating patron of genius. He was not at the time at all aware who the author was, and knew nothing of the circumstances in which he was placed; but remembers being struck with the three first Books being written in a male, the others in a female hand.

The work was successful almost beyond all precedent,—scarcely excepting the works of Scott and Byron, or the Lallah Rookh of Moore; and it is needless to add, that Mr Blackwood, with his accustomed generosity and right feeling, made the family of Mr Pollok ample participators in the profits of its popularity. We believe that almost the last, if not the very last, act of Mr Blackwood's literary life, was the paying over a handsome sum to the relatives of the author, for the copyright of "The Course of Time."

We have seen that, from 1780, when he was elected representative in Parliament for his native county of Caithness, he remained a member of the House of Commons for a period of more than thirty years; during the whole of which time, without holding any situation of pecuniary emolument, he continued, under a succession of administrations, most patriotically to devote almost all his time, and the whole energies of his mind, to the public service. So early as the conclusion of the first American War, we find him writing on the state of our Finances, and dispelling the fears of bankruptcy that then hung over the nation, fostered by the desponding speculations of Dr Price and Lord Stair,—his history of the Public Revenue of the British Empire followed,—and in 1793, Mr Pitt, at his suggestion, brought in his proposal for the issue of Exchequer Bills—a measure of the greatest national importance at the period, and without whose adoption it is difficult to suppose, either how commercial distress could have been relieved, or national confidence restored.

Passing from his parliamentary career, and from his financial investigations, we find that these—enough to have engrossed the whole time and attention of an ordinary man—formed but a tithe of the toil to which the mind of Sir John Sinclair voluntarily subjected itself. In 1790 he had commenced his statistical inquiries; and, after an uncompromising struggle with the most formidable difficulties, for a period of seven years, he brought out the results of his correspondence with upwards of 1000 clergymen, in a work comprised in twenty-one octavo volumes,—which had no parallel in the past history of the world's literature, and which has served as the model for every thing that has since been accomplished in the same way. In fact, we may defy contradiction when we say, that Scotland cannot at this moment boast a prouder monument of the general talents and acquirements of her church and children, than has been collected in the Statistical Account of Sir John Sinclair.* We have also seen that he terminated his labours in

* We cannot resist the temptation of here quoting a paragraph of a letter from General Washington, dated 15th March 1793:—"I cannot but express myself highly pleased with the undertaking in which you are engaged (that of drawing up the Statistical Account of Scotland), and give my best wishes for

this branch of political research, by condensing into one volume the principal results obtained throughout the whole; and his analysis of the great work will long remain a token at once of his research and of his acumen.*

With regard to Agriculture we have before said, that perhaps no man who ever lived has done more, or in such a variety of ways, for the advancement of a knowledge so necessary to the happiness and welfare of the great family of mankind. The subject seems, for half a century, to have been almost always uppermost in his mind, in relation to some particular branch of its bearings; and he spared no expense, no bodily fatigue, and no mental exertion, to promote the welfare of mankind, by increasing the fertility of the earth's surface, and raising what had hitherto been, among all nations of the world, whether ancient or modern, but an imperfectly understood, and consequently an imperfectly practised art, to the dignity of a science, regulated by ascertained laws, and grounded upon fix-

its success. I am fully persuaded that when enlightened men will take the trouble to examine so minutely into the state of society, as your inquiries seem to go, it must result in greatly ameliorating the condition of the people, promoting the interests of civil society, and the happiness of mankind at large. These are objects truly worthy the attention of a great mind, and every friend to the human race must readily lend his aid towards their accomplishment."

* From the following extract from the American Farmer, a work printed at Baltimore (1820), it will be seen in what degree of estimation our Transatlantic brethren held the agricultural exertions of Sir John Sinclair.

"The North British Baronet, Sir John Sinclair, has made us rejoice in America, that we are masters of the language in which he delivered to the world his inestimable and immense collections of agricultural literature. Had his been a foreign tongue, we should not have expected to have seen a translation of them; and the vast body of simple and precious truths—truths in fact, and truths in reason—with which his extensive works are filled, would have remained to the many in America unknown secrets. He has taught us by the happiest examples, and the most effectual means, how to examine, and how to make a perfect exposition of the agriculture of a country, from the scale of a kingdom and a province, down to a county, a hundred, a tithing, or a township. He has drawn, by innumerable traits, so perfect a landed picture of Great Britain, that no traveller of any nation, however familiar with the English tongue, can ever hope to obtain such a knowledge of the kingdom by his own senses. He has a title also to our gratitude, from the generous views he has frequently taken of the colossal stature and natural capacities of our landed interest."

ed principles. Surely the man who has been so mainly instrumental in doing this, must ever continue to be regarded as one of the great benefactors of his species. His fame is above that of the Greek and of the Roman, for it is confined to no time, and it is limited by the bounds of no particular country. Indeed, we doubt if, in looking over the biographical annals of our own or other nations, any individual can be found who has more distinguished himself in so many branches of human knowledge, or who has left behind a greater mass of information on subjects vitally important to the prosperity of the human race. It has been said of him, and truly, that, "though not actually engaged in the conflicts of war, yet he raised and commanded considerable bodies of men, who were of the greatest service to his country, in the dreadful war carried on for so long a period, with the Republican and Imperial Governments of France; while these corps, owing to the excellent system of management he had adopted, were distinguished for an almost unprecedented state of health, and the superior excellence of their conduct; and that, though not a sailor, yet he defended the naval power and character of his country with almost unprecedented ability, when they were depreciated in parliament by a British seaman; while his exertions greatly tended to raise that spirit in the navy, which afterwards produced such astonishing results."

However strange it may appear, yet the history of human society in all ages and nations bears evidence to the fact, that the improvements in all those acts of life which dignify and adorn mankind, generally depend less on any regular or natural tendency in the progress of districts, or even countries to refinement, than on the gigantic exertions of individual minds, who, from time to time, seem raised up by Providence to shew not only what the short span of a single life is capable of achieving, but to stand forth as a beacon to direct the labours and stimulate the activity of others. Beginning with the introduction of agricultural improvements into the remote districts, where his patrimonial estates were situated, the influence of his example soon made itself felt to the extremities of the county, hence his sphere of action widened, pervading Scotland from one boundary to the other; and, while presiding over the

Board of Agriculture, a spirit of improvement was excited, which shewed itself not only throughout the British dominions, but in every country both in the Old and in the New World.

When we look back to the enterprize of that mind which, with undaunted courage, entered upon the great fields of the Statistical Account, the History of Finance, the County Reports, the Code of Health, and other tasks of collateral magnitude, and that, with unwearied perseverance, toiled on to their completion, calling in the assistance alike of books and men to its aid, our astonishment keeps pace with our admiration. Sir John Sinclair was, moreover, during all this period a public man, at one time attending his duties in Parliament, and at another commanding troops. We now see him presiding over the National Board of Agriculture, and now planning improvements in his native county. We find him alive to every discovery in art and science, patronizing neglected merit, and hailing the aspirant after literary renown into the field of fame. Yet we will be told by some, that Sir John Sinclair had his foibles—and so he had—and so has the sun his spots; but, after surveying his public career, after looking at the mass of knowledge, which he has bequeathed to posterity, it would be vain to dispute his claim to a station among the leading men of his age and country. Year after year, as time rolls on, that fact will become more and more apparent. Many of his hints, not yet acted on, will be then found as efficient in practice, as others which has been already proved by the test of experience; many of his speculations for the public good, for which due credit has not yet been assigned to their originator, will then be gratefully acknowledged. The testimony of other nations will be gradually accumulating to swell the mass of his well earned reputation; and the foreigner, visiting the Scottish metropolis, will seek out the spot where the ashes of Sir John Sinclair repose. And it is but just that this should be. The man, who devotes all his time and all his energies to the purposes of personal aggrandizement and selfish ambition, reaps the harvest in his own day; but it is reserved for the loftier mind to look far beyond the sphere of current gossip, or even cotemporary fame, and, if it pursues any end at all beyond the primary one of benefiting mankind, and raising the human race in the scale of being, a

satisfaction may sometimes arise from the cherished thought, that posterity is almost always just, and that the reputation partly denied to the man will be wholly paid to his memory.

On the 15th of December 1835, Sir John Sinclair was seized with his last illness. On the previous day he had taken a long drive, and appeared to enjoy much the conversation of a few friends who dined with him. Professor Forbes and Staffa were of the number.

Having passed an uncomfortable and sleepless night, he was, next morning, found by his servant in a state of great exhaustion. Dr Abercrombie and Mr Hamilton Bell were almost immediately in attendance. He was free from pain, he could not be said to be labouring under any specific disease, and his mind was perfectly collected; but stimulants were found quite ineffectual, either in reviving his strength, or in restoring the tone of the pulse. In this state Sir John lingered for some days, aware of his situation, and contemplating his approaching end with Christian fortitude and resignation. On the 21st, being seized with an affection of the heart, a state of asphyxia came on, from which he could not be recovered; but so tranquilly passed his spirit away to his Saviour and his God, that it is impossible to say at what precise moment he expired. Full of years and honour, his death was in happy conformity with a life spent in doing good, and from youth to old age ardently devoted to the best interests of the human race.

It were superfluous to add, that the death of this great and good man has been regarded as a national calamity; and at the meeting of the Town Council of Edinburgh, held on the day after that melancholy event, Councillor Robertson proposed, and the motion was unanimously agreed upon, "to enter on the City Records the regret of the Council for the death of Sir John Sinclair, and their respect for his memory; and that, in the event of a public funeral, the Council resolve to attend."

From the circumstance of Sir John Sinclair holding no official situation at the time of his decease, it was resolved by his family that the funeral should be strictly private; and, from the circle of his friends being so extensive, it was deemed necessary that only relatives should attend. This resolution, however, it was found impossible, without literally repelling the most ge-

nerous and unsolicited tokens of reverential regard, strictly to carry into effect. The Highland and Agricultural Society of Scotland, desirous of doing honour to the remains of one of its original members, and most indefatigable and distinguished supporters, proffered the attendance of a deputation, consisting of the six senior Directors and the Office-bearers. This was as it should be; and this mark of honourable attention was of peculiar value, emanating from an institution national in its character, and the success of which Sir John had so much at heart. Being deemed not incompatible with the previous arrangements, this honour was cordially accepted; and, on the night before the funeral, the Lord Provost and Magistrates of Edinburgh expressed their wish to meet the procession in their official robes at the gate of the Chapel Royal, and thence accompany it to the place of interment. Of this highly gratifying and most unusual distinction the family also gratefully availed themselves. The princes of Scotland slumber around him in his final resting-place; but, since the sceptre departed from Holyrood, the dust of a more distinguished patriot has not been commingled with theirs.

In person Sir John Sinclair was tall and spare; and even in his advanced years he was remarkable for the elasticity of his gait, and erect carriage. From his characteristic orderly habits, he was exceedingly neat in his dress, and he is said to have been in youth distinguished for his manly beauty. In the private walks of life, and in the exercise of the domestic virtues, he was a perfect model of the Christian gentleman, and with perhaps as few of the faults and frailties inherent in poor human nature as almost ever falls to the share of an individual, he set a noble example to the world of intellectual activity, uniformly directed, from almost boyhood to extreme old age, to the promotion of human happiness.

Before closing this imperfect memoir, let us ask the question, What has Scotland done to commemorate the services and virtues of Sir John Sinclair? Can we point to no pillar—to no statue—to no bust? We may be told that his best monument will be found in his works. This may be true as far as regards him, but is it either just or generous in us his countrymen?