



# WILEY

---

Home Industries in the Scottish Highlands and Islands

Author(s): G. Baldwin Brown

Source: *The Economic Journal*, Vol. 25, No. 98 (Jun., 1915), pp. 284-296

Published by: Wiley on behalf of the Royal Economic Society

Stable URL: <http://www.jstor.org/stable/2222197>

Accessed: 27-06-2016 05:09 UTC

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at  
<http://about.jstor.org/terms>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).



*Royal Economic Society*, *Wiley* are collaborating with JSTOR to digitize, preserve and extend access to  
*The Economic Journal*

## NOTES AND MEMORANDA

### HOME INDUSTRIES IN THE SCOTTISH HIGHLANDS AND ISLANDS.<sup>1</sup>

[*At the end of this review will be found a note on the effect of the present war upon Scottish Home Industries. This has been kindly communicated by Dr. W. R. Scott, the author of the Report.*]

To many people "Home Industries" suggest a somewhat amateurish effort to teach and encourage wood-carving, the tinkering of brass and copper, leather dabbing, and the like, among village lads and lassies whom it was chiefly desired to keep out of mischief. Social and philanthropic aims were prominent at the inception, about 1880, of the home industries movement in England, and there was an active propagation of æsthetic ideas about the immeasurable superiority of work done by hand over that turned out in factories from the machine, ideas associated by the public with the teaching of Mr. Ruskin, and regarded as rather quixotic. Viewed in this light, "Home Industries" present themselves as something artificial, a "fad," of which the serious student of economics need hardly take account.

The truth is that at that time in England the old traditional handicrafts, once so numerous, prolific, and delightful in their artistic results, had passed out of existence, and to start an industry meant the building up of an entirely new agency of production without any historical or economic basis, upon social and æsthetic theories which, however laudable, were of a somewhat forced and doctrinaire kind. Devoted personal service and financial support were always necessary before there could be any chance of the industry attaining to economic stability.

There is a vital difference between the English agencies thus started and sustained and the industries of Scotland that provide the subject of the *Report* of which the title heads this review. Many of these, including all the more important of them, are genuine old traditional industries that grew up naturally in older days, and have survived through centuries to our own time.

<sup>1</sup> Report to the Board of Agriculture for Scotland on Home Industries in the Highlands and Islands. By W. R. Scott. [Cd. 7564.] 1914. Price, 11½d.

The position of these is, of course, quite different from that of the artificial English industries to which reference has been made, for they have necessarily a historic basis, or they would not have grown up and taken root in the particular localities where we find them; and also an economic basis, or they would never have survived to this modern date. This fact gives to the traditional Scottish industries an interest which the newer exotic ones cannot possess, and the study of their history, the conditions under which they are carried on, and the possibilities of improvement and further development is one of great and varied interest.

The *Report* which affords material for this study consists of 165 pages of text, followed by an appendix of 40 more. It has been drawn up by Dr. W. R. Scott, of the Department of Economics in the University of St. Andrews, in a style that combines literary charm with evidence of acuteness in research and a scientific grasp of the subject in its social and artistic, as well as its purely economic aspects. The first fifty pages contain a historical review of the Development of Industry in the Highlands and Islands from the mediæval period onwards, and this is followed by special papers dealing with the chief traditional industries, such as the Highland Cottage Tweed Industry, Shetland Hosiery, Wicker Work, and Basket Making, and the important Kelp Industry, as well as by a supplementary paper embracing miscellaneous activities of less importance, some of which are of the artificial kind already noticed. The position and prospects of home industries, and the possible effect on them of the exercise of the powers with which the Board of Agriculture has been furnished for their benefit, occupy the last 30 pages of the text, and there follow in the Appendix XXX sections giving statistics, special records, opinions of experts, &c., with amongst other things a sympathetic and judicious critique of Mr. Ruskin's "Cult of Hand Work."

This summary of the *Report* indicates the varied character of its contents, and if the publication were not a Blue Book one would expect to find it in every patriotic Scottish household. Its price is less than one shilling, and it may be procured from H.M. Stationery Office, 23 FORTH STREET, EDINBURGH.

The fact that many of these industries are traditional, and that they have not died out, is proof of the advantage Scotland possesses in a characteristic on which she is not seldom commiserated—the remoteness and comparative inaccessibility of parts of the country. To this are due marked contrasts in the economic atmosphere of different parts of Scotland at one and

the same epoch, so that, for example, even in the middle of the nineteenth century, we learn that in the Highlands "the great majority of the people were still clothed in materials made in their own homes." (*Report*, p. 38.) Owing to this characteristic of the country, at the time when Adam Smith, at Glasgow and Kirkcaldy, was laying the foundations of the modern science of political economy, life in the outlying parts of Scotland was being passed under most primitive conditions. An element in that life however, apart from cattle raising, fishing, and an agriculture that at the end of the seventeenth century was in an exceedingly backward condition (p. 9), was the practice of certain activities in production, some of which were of a household kind, and in the hands of the women of a family, while others were outdoor occupations—of a rural rather than a domestic nature—carried on by the men. The chief of the former are the fabrication of woollen tweeds and of hosiery, of the latter the burning of sea-weed for "kelp."

The kelp industry is a very old occupation, and for more than two hundred years it has held an important place in the industrial economy of the western and northern islands. It received its first stimulus from the establishment of sundry factories in the Lowlands, due to energetic, but not always wisely directed efforts to "develop a distinctively Scottish commercial policy," which were made in the latter half of the seventeenth century (p. 7).

Among these manufactures was that of glass, requiring a supply of alkali as one of its materials, and of soap which made the same demand, and it was suggested that the West Highlands might supply it. Martin, in his *Description of the Western Islands of Scotland*, circa 1695, notes that "the coast of each isle in the Hebrides affords many thousand load of sea-ware, which, if preserved, might be successfully used for making glass, and likewise kelp for soap." The industry of burning this sea-weed for alkali was actually started in Orkney in 1722, against the opposition of the peasantry, who claimed all the "sea-ware" for the purpose of manuring the land, but from 1732 onwards it progressed satisfactorily, so that it was calculated that, in the half-century prior to 1791, Orkney proprietors had received from kelp some £370,000. The Napoleonic wars, by cutting off foreign supplies of alkali, greatly benefited the kelp industry, which "boomed" till about 1815 to such an extent that the annual product was about 20,000 tons. After the war however, prices rapidly declined till in twenty years the value of the output had sunk to only  $7\frac{1}{2}$  per cent. of that secured at the height of the

boom, and in 1837 there was a prophecy in McCulloch's *Dictionary of Commerce* that kelp making would soon become extinct. Just at that time however, it was realised that other specially valuable chemical products could be derived from the burning of the sea-weed, and "in this way the kelp and tangle-ash industries obtained a new lease of life" (p. 32). The productive activity was, however, for various reasons in a state of depression from 1840 to 1880, since which date it has gradually revived.

With the kelp industry, especially in regard to its future prospects, there are connected some questions of present interest. Kelp—the word is of unknown origin—is "the ash produced by the incineration of various kinds of sea weed," and it may be noticed that the interests of agriculture are not really affected by the kelp industry, as only certain kinds of algæ are suitable for the latter, and there remains over an ample supply of "sea-ware" for the fertilisation of the land. "The weeds," goes on the *Encyclopædia Britannica*, "are first dried in the sun, and are then collected into shallow pits and burned till they form a fused mass . . . a ton of kelp is obtained from 20 to 22 tons of wet sea-weed." The production of alkali for glass and soap works is no longer the chief purpose of kelp burning, and its main use is to secure the valuable chemical product called iodine, the presence of which in the ash had been detected by Courtois as early as 1812. Just as alkali can now be procured from other sources besides kelp, so there is a rival production of iodine from sodium nitrates found in Chile and Peru, and from this source is derived at present four-fifths of the 10,000 cwt. which is the world's yearly consumption of iodine. The situation thus created is discussed by Dr. Scott in a special paper on "The Kelp Industry." The important element in it is the fact that the Chilean nitrate fields are so far from inexhaustible that their failure has been prognosticated for about the middle of the present century. On the assumption (which events may of course prove a fallacious one) that no new source of supply for iodine will be discovered, the production from kelp will become proportionately more important, and a wise forethought would suggest the development by every means in our power of this particular portion of our national resources. Sea-weed of suitable kinds is, of course, to be found elsewhere in the world besides the Scottish islands, and kelp is now made for the purpose of iodine production in France and Japan as well as on the western sea-board of North America. At the same time other chemical products, such as

potash salts, with a large number of other minor commodities, are extracted from the material, and "at present, from her kelp industry, Japan is able to export potash salts to Great Britain, Australia, Italy, Germany, the Straits Settlements, and the Dutch East Indies. In addition, Japan exports iodine valued at £192,000 to the United States, which represents 80 per cent. of the total consumption of £240,000 per annum," while the United States imports from various regions twelve million dollars' worth of potassium salts (p. 125).

It is obvious accordingly that for the potential products of seaweed burning there exists a considerable demand that may in the comparatively near future be largely increased. How does this affect our own country? We shall not be surprised to read that, while our "present methods of kelp-making are so wasteful that there is ample room for improvement" (p. 120), "it is galling to have to record that most of the recent improvements in the treatment of seaweeds are of foreign origin, most being American, while some are to be attributed to the Japanese" (p. 121). One difficulty in the way of advance in the Hebrides is the conservatism of the people, who have not yet realised the new potentialities of an industry two hundred years old, that has been carried on not on its own footing alone, but in alternation with agricultural operations on the crofts. An authority from South Uist writes as follows in one of the Appendices to the Report:—

"It is admitted by those who engage in the industry that with energy anything up to £1 a day can be made at it. Unfortunately, however, the people play with this industry as they do with anything else of the kind, and it is a common sight to see thousands of pounds' worth of weed rotting on the seashore, while the people are digging round their patches of land or doing some other kind of work about their premises from which no benefit can be derived. It is true as regards kelp-making, just as it is true as regards fishing, that the industry cannot be worked to advantage when it is combined with any other profession. To a crofter, the working of the croft is something that must be done. His forefathers devoted all their attention to it, and the world would come to an end if the present generation did not do likewise. The possibilities of the kelp and tangle industries are not half realised by the people, for it can be easily shown that an energetic family can make anything up to £100 per annum out of the industry. To do this, however, would mean that those engaged in it would have to work hard and at the same time work so many hours a day. . . . The same dilatory methods are adopted in regard to tangle (seaweed) collection as go on in regard to kelp-making, and thousands of pounds are lost annually" (p. 177).

The writer here quoted admits that the kelp industry has within the last dozen years been greatly improved in the economic aspect by changes in the system of reckoning payment, &c., but much still on this side obviously remains to be done. The import-

ance of setting this industry upon a satisfactory basis in view of future developments can be judged from the significant fact emphasised by Dr. Scott, that the raw material collected on our coasts in the form of the algæ is particularly rich in the valuable element of iodine. The figures he gives on his p. 130 seem to show that the Scottish algæ contain nearly double the percentage of iodine as compared with the Japanese seaweeds and those of the Pacific coast. Iodine is of great importance in medicine, and is used in chemical and photographic processes, and with the advantages of a rich natural supply a good deal of profit could be secured from the industry, if carried on scientifically and under proper economic conditions. At the present juncture in public affairs special attention is being turned to industries of a chemical character, and kelp-burning appears to be just one of those in which a determined effort should be made to overcome difficulties and raise the standard of national efficiency. To sum up the matter in the words of the *Report* :—

“In order that Great Britain should participate in the benefits from this industry, to which she is entitled by the good quality of her marine algæ, it is necessary that scientific knowledge and commercial ingenuity should be applied to the processes of organisation and of manufacture. The islands of Scotland have very few of the gifts of nature in a higher degree than other localities. In the high proportion of iodine and other valuable constituents of their marine algæ they do possess such a gift, and, now that the time is becoming ripe, this source of wealth ought to be worked to better advantage than it has been in the past” (p. 130).

Kelp-making, as the reporter admits, is not a “home” industry, nor can it be suitably called “rural,” the alternative term he applies to it. It stands really by itself, and it differs from the home industries proper, presently to be noticed, in that no artistic interest is connected with it. This last may be said also of a minor industry that was started artificially more than a century ago, and after a change in its character “is still in its initial stage,” though there is promise in it for the future. The reference is to wicker work, basket making, &c. This was first introduced into the northern islands early in the nineteenth century as a substitute for the linen industry, which was at a standstill owing to the cutting off through the war of imports of flax. It took the form of straw plaiting, an instructor being brought from Dorset, and the material being, in part at any rate, home-grown rye straw. At Kirkwall, Lerwick, Thurso, &c., “straw plaiting remained for a long period an important occupation for women.” In the *New Statistical Account*, about 1840, it is said that in Orkney three-quarters of the female population

was at the time employed on the work. After this it went down, but gave birth before its extinction to various industries of wicker-work, the most promising of which is the making of quarter-cran baskets for the fishing trade. Work of the kind, at first in the cottages, and later on in a small workshop or factory, was set on foot by the Skye Osier Company, at Kilmuir, Skye, recently started by private agency in order to provide additional employment for the people. The social conditions which suggested the experiment are thus described. It was noticed :—

“First, that crofters who fished in the summer-time were scarcely employed for two hours a day, on an average, during the winter on their crofts; and, secondly, that lads had no regular work, and that there was a tendency for them to fall into indolent and loafing habits. To remedy this it was proposed in 1907 to start weaving, but this scheme was abandoned in favour of another which was based on the skill shown by the people in the making of peat creels and on the admitted fact that the climate of Skye was favourable for the growing of osiers. Thus, more than a century ago, Dr. Walker wrote of the natural advantages of the Hebrides for the cultivation of these” (p. 110).

The quotation has been introduced because it calls attention to the importance of basing any fresh industrial experiment, if possible, on the traditions or circumstances of the particular locality, so that it may have some natural roots, and not be merely an exotic.

For example, in old days there was a Shetland rug industry, and attempts have recently been made to revive it.

“These rugs, two or three generations ago, formed a part of the dowry of girls, and when they married were used as bed-covers. Thus they belong to the period when Shetland woolwork was dyed, the colours being obtained from plants and lichens. Their durability, as well as the permanence of the colours, is remarkable; and they are capable of being used with effect in house furnishing. . . . The argument which has been put forward in favour of a revival of the industry is that it would afford a means for consuming the coarser wool, which is adapted to this purpose, but not to hosiery. . . . In Shetland . . . rug-making would be within the powers of a family during the winter months” (p. 115).

An industry carried on under these natural conditions should have a future.

In regard to the growing of the osiers necessary for the supply of material for the baskets, the same difficulty has been experienced as was noticed in the case of the kelp industry :—

“The people are disinclined to try experiments. Osier-growing would be a valuable use for suitable land. . . . It is unfortunate that, as yet, so little progress has been made in this form of cultivation in Skye. . . . Everything seems favourable for the experiment, save the inertia of the people” (pp. 112, 148).



A transition to the industries to which an artistic interest attaches may be suitably effected through a brief reference to pottery making. Largely through the scarcity of suitable clays, pottery has never been one of the traditional Scottish industries, and attempts to introduce it in recent years have not met with success. In the older England, on the other hand, the craft of the potter flourished exceedingly, but in modern times, as an artistic industry, it has entirely died out. Taking the world over, pottery made under simple, almost domestic, conditions has been one of the chief products of human industry, and from neolithic times downwards till the modern era of the factory, hardly a single vessel of baked clay has left the hands of its moulder without having become in form or ornament, or in both, a work of art. Nothing is more interesting than to note the infinitely varied forms in which through the manipulation of the clay, or the glaze, a touch of interest and of beauty has been imparted by the worker to the homely product. This tradition, which is of the hoariest antiquity, has completely died out among progressive European nations, but still survives in some of the outlying countries. The museum of the beautiful Galician town, the name of which can no longer be pronounced, but is written *Lwow*, contains a suite of rooms devoted to the display of peasant pottery from innumerable villages under the names of which the exhibits are grouped. Every piece is worth looking at, and there are constantly in evidence the qualities of style, character, quaintness of form or ornament, beauty of colour and texture. In the neighbouring Roumania one may see an itinerant vendor drive up in a little donkey cart to the outskirts of a hamlet, and unload and lay out on the grassy margin of the road a little cargo of pots which he sells for a few pence to the villagers. In their very unpretending fashion the jugs and cups and bowls are quite artistic, the splashes of coloured glaze being disposed on them with unerring tact, and the forms often delightful to the eye. At the great yearly fair in Bucharest the big plain where it is held appears simply covered with peasant pottery brought in from all parts of the country, no piece of which is without some of the quality that William Morris has taught us to look for in the products of any genuine traditional hand industry.

The important point here is the following, and it is one that has a bearing on the future of some Scottish artistic industries that will presently be noticed. The Roumanian Government some time ago took note of the excellence of the peasant pottery of the country, and set to work to "improve" it. "Design" was

taught in local schools, and there was set up a central crown factory for Ceramic wares, from the output of which great things were expected. Now it is a fact, perhaps surprising to "the man in the street," but exactly in accordance with what William Morris or any one else of real experience would have predicted, that the result was a total failure! The crown-factory products are entirely devoid of the artistic charm of the naïve essays of the local potters, who worked unconsciously under the guidance of a sound tradition, and it is recognised that if these well-meant experiments were continued Roumanian peasant pottery would go the way of that of England or France. There is a warning here of which the *Report* might usefully have taken note. Dr. Scott takes due account of the artistic aspect of some of the industries he discusses, but he would have fortified himself much better in respect to this part of his task had he relied on William Morris rather than on Mr. Ruskin. Ruskin's views were sound enough, but he was extravagant and amateurish in his expression of them, whereas Morris, though a poet and an enthusiast, was a practical man of affairs, the value of whose work has now been recognised at that former stronghold of artistic philistinism—South Kensington. A course of Morris would explain not only the æsthetic superiority of hand-work over that turned out from the machine, but the extreme risk involved in the attempt to "improve" traditional designs and methods of artistic manipulation. The worker on traditional lines can of course be stimulated by encouragement to achieve better and more tasteful results than he had compassed before, but if his work be torn from its roots in the tradition of the industry and transplanted to the forcing house of a school of design, there is great risk that the charm of the old unsophisticated handicraft will be lost. There are one or two hints in the *Report* of possible "improvements" in design in Harris, Fair Isle, and Shetland textiles, that make uneasy the prophetic soul of anyone who knows how facile it is to kill by kindness delicate things of this order. The economics of an industry are something hardy that can be tinkered and experimented with, and yet survive, but the tradition of a genuine old artistic craft had better not be meddled with by the modern reformer.

That there is genuine art in some of these Scottish household industries is made plain to the reader of this *Report*. The designs of Fair Isle hosiery are supposed to be derived from patterns introduced by shipwrecked Spanish seamen from a galleon of the Great Armada. "Either by natural aptitude or by a long process

of development," writes Dr. Scott, "the people have a gift for artistic craftsmanship, which has shown itself in the success of their hand-work in the textile industries, such as Shetland hosiery or tweed" (p. 141). In the latter "the more experienced workers display very great artistic ability in the blending of colours" (p. 57), mainly prepared, though one is sorry to hear not entirely, from local vegetable dyes. An Appendix gives a list of nearly fifty "Native plants used as dyes in tweed-making," but there is a sinister ring about the words following the last quotation, "recently other good dyes have been used, with a view to increasing the number of shades in the tweed. No doubt the choice of some purchasers will continue to favour the subdued harmonies of the local natural dyes; *while a new demand may arise for somewhat brighter colouring*"—the italics are the present writer's. Later on in the *Report* it is stated that "there is more than a suspicion that many of the new colours fade"! (p. 152). A Departmental Committee on the Truck Acts went out of its way, in 1908, to record (p. 48) "an interesting fact" that it "had evidence with regard to the conditions and products of labour of a great variety of trades, but in none have there been such indications of high artistic excellence as that involved in this home labour. When it is performed in country districts, the products of the natives, say of Shetland in hosiery, or of Donegal in embroidery, afford constant proof of very high native and inherited skill." The history of Scottish weaving, both of wool and of linen, can be traced back to the fifteenth century, but the now famous Harris tweed industry had its effective beginning about 1844, nevertheless "the ultimate cause is to be traced still further back to the skill in spinning and weaving of the workers and their natural taste in the blending of colours" (p. 33). In the case of the important industry of Shetland hosiery, where "the most artistic work is the knitting of fine lace shawls and scarves, we have the very interesting notice that "the design develops during the progress of the work. Many of the most skilled knitters cannot give details of the pattern they intend to make—it simply grows under their hand as they knit; and yet at the end, when it is examined, it will be found to be well balanced and satisfying" (p. 86). The reporter appears doubtful whether this is altogether orthodox, but it is just a surviving example of what was once characteristic of all the traditional artistic handicrafts, the growth of adornment out of the process of manipulation. One great reason why the work of old time is so artistically pleasing is that the ornament has, as it were, developed naturally from

within outwards, instead of being picked out of a pattern book and superimposed ready made on the product as in the bad days of the Science and Art Department. In Shetland hosiery, moreover, the effects of colour are gained merely from the material, for all the tints in Shetland shawls that are so tastefully contrasted or blended are the genuine hues of the wool, no dyeing process being invoked. It is said that there are upwards of a hundred shades, from white to a very dark brown that passes for black, and it is noted that "all these tints of brown are reproductions of the colours of peat, which is found in many of the districts where the sheep graze" (p. 82).

To these beautiful qualities of colouring the wool of the Shetland sheep unites those of extreme fineness and a soft and silky character, so that a lovelier material of its kind does not exist upon earth. The industry that manipulates this material is from the social or human side attractive to read about, and Dr. Scott gives us some interesting glimpses at a traditional handicraft still carried on under conditions that make work a pleasure. The wool is plucked from the sheep, and commonly carded, or combed, by hand. The carding is made a social function. The women gather at a house where wool has been plucked, and the carding goes on from tea to supper time in company. Later on the young men arrive, and there follows a dance. The wool is spun by hand, and the knitting is carried on almost continuously, and is combined with other occupations, even to an extent which Dr. Scott observes tends at times to make it too mechanical and to lower its quality (p. 88). Fine knitting is, however, a tradition, for there is a "Description of Shetland" published in London in 1753, not noticed in the *Report*, in which it is stated "the Gentlewomen, who make stockings for their amusement, work them very fine, even so much so, that one of that Country, who was here" (in London) "lately, and whom I knew there" (in Shetland) "told me, he had sold a Pair here of his Wife's making, for four Guineas." At the time we learn from the same source a Shetland pony could be bought for three half-crowns, though a stranger might pay £1 for a good one.

The *Report* rightly concludes that "a trade which has been long established, and which results in an annual production of at least £30,000 a year, is worth cultivating" (p. 88), and two points for special consideration are noted. One is the preservation of the purity of the breed of the sheep, which is in some danger of deterioration, and here practical measures for safeguarding the industry at this its ultimate source are well within the compass of the activities of the Board of Agriculture. Another point is the

comparative failure of the workers in the matter of the shapes of the objects of hosiery they turn out. Complaints are made of this by London dealers in Shetland goods (p. 87), but here again improvements should be easily compassed. Instruction and the provision of suitable models and appliances should remedy the defect, and there is no such danger here as would be present if there were any attempts to tamper by way of "amelioration" with the colour arrangements or the evolution of the designs.

Space does not allow of any detailed analysis of the large portions of the *Report* concerned with the well-known "Harris tweed" industry—one, as we have seen, with old roots but of comparatively recent development. With this industry, as with that of Shetland hosiery, are connected important and rather difficult questions of the relation of hand work to machine work, of the official supervision, inspection, and stamping of products, of the different kinds of demand for the commodity, and the economics of its making and its distribution. On all these questions Dr. Scott writes in a broad and genial spirit, but fortified at every point by the results of special investigations. The artistic merits of the product in colouring and design, and the danger of interfering with these, have already been indicated. A question of special interest that will be asked about it, alike by the economist and the æsthetic expert, is whether pure hand-work continued through all the processes from first to last really pays, or whether the predilection expressed for it is only of the nature of a "fad." On this question the *Report* furnishes fairly satisfactory evidence. As a fact machine carding for the wool has largely been substituted for the hand carding which is the rule in the case of the Shetland wool, yet "those who have had a long acquaintance with Highland tweeds speak in favour of hand-carding" (p. 55), and "several weavers" have spoken strongly "of the deterioration of the wool for their purposes by machine-carding" (p. 58). As regards the subsequent processes, an inquiry, technical and statistical, carried out in 1912-13, showed that "there was a substantial balance of opinion in favour of the advantages of hand-spinning and hand-weaving in tweed" (p. 138). Technical investigation proved that hand-spun yarn had more twist in it than that spun in the machine, and this increased its strength. Moreover, "it is practically impossible for the hand-spinner to use shoddy, owing to the extreme difficulty of turning it into yarn. Thus hand-spinning is a guarantee against shoddy" (p. 139). Furthermore we learn that "there is a third advantage which hand-work has in tweed-making, namely, in the weaving. The thrust of the power-loom is automatic, and so it cannot adjust

itself to any temporary irregularity of the yarn. The weaver can do this, and so a good hand-woven cloth has greater elasticity" (p. 139). Finally, in the finishing of the fabric there is a corresponding advantage in hand-work, for "mill-finishing has the effect of hardening the surface of cloth, and may make it less yielding" (p. 74). It is the quality of elasticity in the "Harris" tweeds, and the combination in them of lightness and warmth, that make them popular with sportsmen, while they are also good at throwing off moisture because in hand-finishing more is retained of the oil which is naturally in the fibre, and is also used in some of the processes of home-manipulation (p. 74).

The Reporter discusses the possible or probable future position of the demand for this "light, elastic, damp-resisting and durable tweed" (p. 75), which also offers "scope for inventiveness in design and texture" (p. 76). It is satisfactory to know that merchants agree that the best webs of cloth are the easiest to sell (p. 73), though the price may rise as high as 7*s.* 6*d.* a yard. On the whole it is concluded that "from the technical standpoint the prospect of the cottage tweed industry—and more particularly that part of it depending on hand-spun yarn—can be regarded with considerable confidence" (p. 140), though naturally there are many considerations regarding the organisation and financing of the industry that require careful attention. These Dr. Scott discusses with some fulness in the *Report*, but it is not possible here to enter upon this subject, which is a very large one.

On the whole Dr. Scott seems to look with a chastened satisfaction on the future prospects of the Highlands and Islands Home Industries, but is fully alive to the need for guidance and care, as well as for action in many directions which he indicates. "Home industries," he says in one place, "will probably remain a most valuable agency in augmenting the resources of the people" (p. 143), but in another we read that:—

"With reference to the prospects of industries in the Highlands, it is necessary to speak with a certain amount of circumspection, more especially when one remembers how events have hitherto falsified optimistic forecasts and have confirmed those of a pessimistic nature. . . . For some reason, which may be either racial or geographical, or perhaps both, it is necessary to discount largely from hopeful anticipations of industrial progress in the Highlands."

Into the racial question, perhaps with a wise discretion, Dr. Scott does not enter, but he concludes on a more hopeful note:—

"After giving due weight to the unfavourable tendencies and discounting from the favourable ones, there are, I believe, good grounds for regarding the future of these industries with a considerable degree of confidence, provided their development is guided wisely" (p. 136).

G. BALDWIN BROWN