

English and Scottish Farmers in Poland in the First Half of the Nineteenth Century

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THE problem of British agricultural settlements on Polish soil has not till now been investigated by historians. There are, however, some extremely valuable and interesting documents concerning this problem among the archives of the Agricultural Society in Warsaw for the period 1810 to 1825, and also among the Zamoyski Archives which were rearranged only a few years ago. This article is based mainly on these sources, supplemented to a small extent by information from Polish periodicals of the nineteenth century.¹

Already in the eighteenth century English and Scottish farming represented the ideal of agricultural progress for the Polish landowner. From the end of the eighteenth century the so-called 'new agriculture' began to penetrate Poland, while after the Napoleonic Wars feverish attempts were made to improve the backward techniques of cultivating land by drawing upon examples of rational farming from the West. There were, however, too few people to cultivate the vast areas of land that had lain untilled during the Napoleonic Wars, and there was a shortage of qualified agronomists as well. In these circumstances official policy was directed towards the modernization of farm equipment and to the recruitment of skilled farmers, and estate officials, as well as mechanics and craftsmen from other countries. Amongst the specialists who came to depopulated Poland there were a number of Englishmen and Scotsmen who made a considerable impact on our nineteenth-century agricultural and industrial history.

It has proved very difficult to trace every single British farmer who came to Poland after 1815, and in consequence the greater part of this article is devoted to the story of the largest colony—both in respect of farms and population—of Englishmen and Scotsmen in Dowspuda. None the less, a few other examples will testify to the slow but steady influx of individual British farmers into Poland. The immigration was not impressive numerically

¹ Thanks are due to Mr George Gomori of the Centre for Russian and East European Studies, Birmingham University, for this translation from the Polish, and to Mr J. W. Y. Higgs for help with technical points.

but its importance for the advancement of Polish farming was enormous.

Some of those who were responsible for bringing individual British farmers to the country were only moderately wealthy Polish landowners. The outstanding Polish agriculturist, General Dezydery Chłapowski, was one of these. He was a propagandist on behalf of Scottish agriculture, and on several trips to Great Britain befriended the best English and Scottish agronomists. During his visit to England in 1823 he bought a portable threshing machine of the Meikle type and several Scottish ploughs and in addition to this he contracted with two Englishmen to work on his estate in Turew.¹ One of them was employed as a steward, while the other was overseer for machines and agricultural tools, instructing the labourers on the estate in their special tasks and organizing efficient management as well.² From the eighteen-thirties onwards the first contracted tenants from England and Scotland began to arrive on the family estates of the Zamoyskis. Thus, for instance, Andrzej Zamoyski, the son of the heir-in-tail Stanisław, an outstanding and exemplary farmer, settled the Scotsman, Dickson, on his family estates of Jadów in Zawiszyn manor.³ This tenant was famous as an excellent breeder of purebred cows who produced yearly more than 500 quintals [53,638 British lb.] of excellent cheese of the Cheshire type which was very much sought after by the urban population in Poland. From the eighteen-thirties onwards, the heir to the estate, Stanisław Zamoyski, also brought tenants from Great Britain to his family estates in Magnuszew, and Maciejowice on the Vistula. One of these, called Gowenloh, took a lease of the manor of Podlęż, and another called Broomfield leased the manor of Gruszczyń.⁴ Both tenants were famous for their exemplary farming and cattle raising. Thanks to their mechanized equipment for the processing of milk, they, like Dickson, produced thousands of pounds of Cheshire cheese which was quickly snatched up by local and Warsaw merchants.⁵

Several dozens of English and Scottish tenants occupied manors in the province of Lublin as well. The farm of David Wilson, who in the 1840's took over the large manor of Biszczka,⁶ situated on the extensive estates of the Zamoyskis, will serve as an example. This manor comprised 9,501 *morgs* (13,111 British acres) of arable land, meadow, and pasture, of which about

¹ A village in the Kościan district, province of Poznań.

² W. Koszutski, Dezydery Chłapowski, *Encyklopedia Rolnictwa i wiadomości związek z niem mających*, 1, Warsaw, 1873, pp. 501-8.

³ In the Wołomin district, province of Warsaw.

⁴ In the Garwolin district, province of Warsaw. This is almost certainly the Scottish surname, Gowanlock.

⁵ 'Sery polskie' (Polish Cheese), *Tygodnik Ilustrowany*, no. 303, Warsaw, 1865, p. 28.

⁶ In the Biłgoraj district, province of Lublin.

500 *morgs* (690 acres) were left uncultivated and were covered with heather and moss. According to an account from 1851, "Mr. David Wilson, wishing to make use of this piece of land, dug ditches and thereby drained it considerably. He expects that in due time thanks to his efforts and expenditure on further dyking this land will become fertile."¹ His task was made easier by the fact that the inhabitants of the five neighbouring villages, although long lease-holders, were nevertheless obliged to provide so-called *odrobki* (labour services), that is, unpaid labour on Wilson's manor during busy seasons. This farmer introduced various crop rotations on some of the land under cultivation, while the rest of the land was cultivated on the four-course. The main crop cultivated there was rye, of which Wilson sowed an average of 100 *korzec* (i.e. 353 bushels) a year. Only 24 *korzec* (85 bushels) of wheat were sown on the Biszczka manor since the soil was unsuitable for wheat and it did not grow successfully. Keeping strictly to a crop rotation, a large part of the land was sown with clover to feed the considerable numbers of livestock. From all this, it is clear from the accounts dating from the early 1850's that this manor, in spite of considerable financial outlay, did not yield any profit. Only later did Wilson's farm bring any return for the money invested. Capital investment continued for more than ten years, during which time the farmer's economic situation was only saved by the profits of a large distillery. During a trip to England Wilson bought modern distillation equipment for it. Furthermore, a large orchard attached to the manor was kept in exemplary order by a qualified gardener. In the place of old and useless farm buildings Wilson erected new cowsheds, stables, and barns. He added to the agricultural machinery, first by introducing one, then two, threshers, two chaff-cutting machines—a treadmill type and a hand-operated one—also a drill on the English model. On his manor he employed one steward, one stackyard-keeper, two female workers, and 19 farmhands—23 persons altogether. He kept 28 horses and 30 oxen for the field work. Besides this, he reared 10 thoroughbred horses for riding, and pulling his coach. There were 96 purebred cows in the cowsheds, among them 42 heifers, and also several hundred (between 300 and 800 head) of merino and improved sheep. Altogether the number of livestock, although appearing large at the first glance, was not sufficient for a manor of that size. These figures, however, are taken from the early 'fifties, whereas in the following years the situation greatly improved. Before Wilson finally achieved any profit eleven

¹ Wojewódzkie Archiwum Państwowe w Lublinie (The State Archives of the Lublin Province) [henceforth W.A.P.L.]; Archiwum Ordynacji Zamojskiej (Archives of the Estates of the Zamoyskis) [henceforth A.O.Z.], no. 16188, f. 82: Raport o stanie gospodarstwa wiejskiego w folwarku Biszczka w 1851 r.

years of hard work and strenuous financial effort lay behind him.¹ This, however, was a rather isolated case; on the whole, British tenants obtained manors that were productive and possessed fertile or medium-fertile lands.

I turn now to the history of the largest settlement of English and Scottish settlers in Poland, established in 1816 on the estates of General Ludwik Pac in Dowspuda.² It should be mentioned that Britons had a special liking for the north-eastern parts of Poland because of the fertile lands, the abundance of woods, lakes, and rivers rich in fish, and also because of the unusually advantageous conditions of settlement offered to them by the Polish landowners living in the area. They began arriving in Poland from 1816 onwards, coming mainly by sea to Gdansk. A contemporary chronicler wrote in 1821: "Every year adventurers³ and farmers arrive in Prussia⁴ and in Poland from England and Scotland. Apart from those settled on Count Pac's estate of Dowspuda, one has acquired ownership of quite a large estate near Nowe Miasto, close to the Prussian border, in the province of Augustów; still another has bought a lease for life on a small estate, situated in the district of Kukow. Some have returned again to the port of Królewiec where the majority of them have remained. This is because the artful Prussian government, not wanting to have to establish a colony for them at Królewiec, effectively kept the richer Englishmen there by making them pay for the houses that were built there for them."⁵ As we can see, the Prussian government was also eagerly trying to attract British settlers and entrepreneurs to its depopulated agricultural areas.

Ludwik Pac, mentioned above, ex-general of the Polish Army, returned to his family estates in Dowspuda after 1815 and occupied himself with farming. In landowning circles he earned himself the title of a "reasoned Anglophile." He was, indeed, an enthusiast for English and Scottish agriculture, and made many acquaintances and contacts with British landowners. He expressed his sympathies for English culture and good management not only by bringing to Poland farmers and craftsmen from Great Britain but also by building a splendid palace. This palace was modelled on the residences of

¹ W.A.P.L., A.O.Z., no. 16188, ff. 83-4, 226.

² Dowspuda is a village in the Suwałki district, province of Białystok, and was the main manor of the estate. Altogether it consisted of six manors, situated in the present districts of Augustów and Suwałki, about fifteen miles to the south and south-west of the town of Suwałki.

³ Adventurers here include entrepreneurs and craftsmen.

⁴ This is a reference to former East Prussia, the territory of which belongs at present to the provinces of Gdańsk and Olsztyn and also to the U.S.S.R.

⁵ Archiwum Główne Akt Dawnych w Warszawie (Central Archives of the Old Acts in Warsaw) [henceforth A.G.A.D.]; Archiwum Zamoyskich [henceforth A.Z.], no. 100, f. 801: O koloniach angielskich w Królestwie Polskim, 1821.

English lords and built in the Gothic style by the Italian builders, Bosio and Enrico Marconi. The numerous frescoes, stuccos, and statues that decorated the palace were executed by Roman artists under the direction of Nicola de Angelis, a disciple of Landi. The beauty of this building and Pac's services to Polish agriculture inspired the proverb: "Pac is worthy of his palace and the palace is worthy of Pac" (*Wart Pac palaca, a palac Paca*; the actual meaning of the proverb is roughly "They are tarred with the same brush"—The transl.).¹ Pac became famous not only for his patriotism and his concern to arouse Polish agriculture from its state of decay but also for his political and social activities. It is worth mentioning that after his return from Great Britain in 1816 he offered, amongst other things, models of Scottish agricultural implements and machines to Warsaw University which enriched the educational equipment of that institution in the field of technology and mechanics.²

The estates of Pac at Dowspuda had been destroyed and depopulated as a result of military activities in the Napoleonic Wars. Consequently, an entire system of farming had to be started from scratch. Pac decided to carry out this reconstruction following English and Scottish models, with the help of migrant farmers from these two countries. Already in the autumn of 1815 he had brought in a few Scottish farming families and eleven families of German settlers from the Rhineland. But within a year Pac had ordered the German settlers to leave the farmsteads assigned to them. The Germans, in spite of widespread beliefs to the contrary, showed no ability for farming, proved to be very poor farmers, and even their solvency was in doubt.³ In

¹ K. Kaszewski, 'Ruiny zamku w Dowspudzie' (The Ruins of the Castle in Dowspuda), *Tygodnik Ilustrowany*, no. 276, Warsaw, 1865, pp. 4-6. After the Polish-Russian War of 1831 Ludwik Pac emigrated to London, while his estates were confiscated by the Russian Tsarist authorities and sold to private buyers. His famous palace in Dowspuda crumbled into ruins in a few decades, and his collections of works of art and books were sold or plundered.

² J. Bieliński, *Uniwersytet Warszawski*, Warsaw, 1911, vol. II, p. 468.

³ A.G.A.D., A.Z., no. 100, f. 80r. The author of this manuscript gave the German colonists who arrived in Poland after 1815 the unflattering name of "tramps from the Rhineland," thereby stressing their inability to improve Polish farming and their lack of qualifications. On the other hand it is known that the German colonists who settled down in eastern Poland at that time did not fulfil the hopes attached to them, and turned out to be very poor farmers. Here is an opinion about the German colonists on the estates of the Zamoysskis in south-eastern Poland: "The settlers in Sitaniec (a village in the Zamosc district, province of Lublin), like others of the same kind, give themselves up to the habit of excessive drinking. This vice is so widespread that in spite of the favourable conditions of their colonies, they are not at all well-off financially. . . They have not started a single elementary school until now, and the majority cannot read or write. In general, they have made no progress but rather regressed in relation to their predecessors, all of whom were literate, and who developed colonies and farms to the stage in which we see them now, and in which they left them to their successors."—'Opis

their place, Pac brought in during the years 1816-18 more than 60 families of tenants and farmers, mainly from Scotland. On the lands of a few bankrupt manors and depopulated peasant farms all settlers received large allotments of land, granted under leases of 25 years. In a short time the new colonists efficiently organized farming on the lands allotted to them. Within a few months they had erected living quarters and farm buildings, using the free building materials given them by Pac. In less than a year English and Scottish craftsmen had equipped the settlers with all the necessary tools and agricultural machinery and also with carts and other farming implements. Some of the small manors and newly established larger farms were given new names which reminded the settlers of their native country. Thus one of the manors became "New Scotland," another got the name "Gowenloh." At the start, the yearly rent paid by the British was fixed at 3 *zlotys* for each Magdeburg *morg* of land (i.e. 2s. 5d. for every 0.63 acres). To make the payment of rent easier, the settlers could pay the manor in grain reckoned at current market prices instead of in cash. The average area of each farm allotted to the Scotsmen and the Englishmen was between 280 and 560 Magdeburg *morgs*, i.e. 176 to 353 acres of arable lands and meadow.¹

The relatively fertile lands on the Dowspuda estates were, however, exhausted by the three-course system of cultivation that had been used for centuries; they were also badly overgrown by weeds. At first the settlers did not introduce a crop rotation but concentrated on the thorough cultivation of the fields and application of supplies of animal dung and compost to the soil. In the first two years, 1816-17, grain was sown on the greater part of the land, thus supplying large quantities of straw for the needs of the livestock. Flooded land and meadows were dried out with the help of drainage ditches. Wherever the soil was too dry and sandy, it was consolidated with manure mixed with peat. Amongst the new crops introduced by the settlers the so-called Swedish turnip appeared, as well as clover, until then unknown in these parts; furthermore, the settlers intensified cultivation and increased the acreage of wheat, rapeseed, potatoes, hops, and mixed corn.² This is how the Scottish tenant, Thompson, as early as 1816, improved the condition of his farm. He sowed 90 Magd. *morgs* [56 acres] with Swedish turnips which

gospodarstw kolonistów niemieckich w dobrach Ordynacji Zamojskiej', *Encyklopedia Rolnictwa i wiadomości związek z niem mających*, II, Warsaw, 1874, pp. 1038-9. We give this description in order to contrast it with the flattering opinions about the British settlers which appeared in the Polish press of the nineteenth century.

¹ A.G.A.D., A.Z., no. 100, k. 801. It should be mentioned here that Ludwik Pac at the same time was amongst the first landowners in Poland to abolish serfdom on his estates, changing labour services into money payments.

² The Polish word is *orkisz*, which is a mixture of barley and wheat.

served as fodder for his cattle and sheep. He sowed potatoes on a similar acreage, "and, apart from that, on a well-manured, well-cultivated field that had been cleaned of couch grass he sowed 192 Magd. *morgs* [121 acres] of wheat in places where, in consequence of the abandonment of the farmstead and of neglected cultivation, only 12 *morgs* [7.5 acres] had been sown before. Despite the handicap of a rainy year, the resulting turnip crop contributed to the upkeep of the cattle to a greater extent than in previous years. Indeed, without it, the stock could not have been fed, for the meadows were flooded and hay was short in consequence. Besides, swedes have proved to be the best fodder for local cattle; when fed on them the cattle quickly improve in strength and the cows give more and better quality milk than those kept on traditional fodder."¹ It should be added that the farmers in Dowspuda also set up a hop plantation on 12 Magd. *morgs* [7.5 acres] of land.

In connection with the increased numbers of cattle and the establishment of an up-to-date distillery, potato cultivation was intensified. In 1817 potatoes were hardly known in this area, as previously they had been cultivated only on small garden plots around the manor. According to the report of Joseph Olszewski written in 1825—he was a graduate of the Agronomic Institute in Vilna and received a scholarship from Prince Adam Czartoryski—potato yields on the Dowspuda estates were around 11,000 *korzec* (380,737 bushels), of which about 40 per cent was used by the distillery. Joseph Olszewski, an eye-witness of the field work of Scottish farmers in Dowspuda, described the methods used in potato cultivation in 1825 thus:

"I have arrived at Dowspuda just at the time when the Scotsmen are busy with the cultivation of potatoes. I have observed in the fields the most thorough cultivation of this plant with which the Scots are (of all people) best acquainted. The manner of their cultivation should serve as an example. It runs as follows:

"Preparation of the land. The more sandy and brittle the soil is, the better they like it, since it does not have to be as often loosened as the heavy, clayey soils which, if they are not scarified every few weeks as is garden soil, will not produce a crop of potatoes worthy of the land's fertility. Either rye or barley may be sown after potatoes. The land for the potatoes has to be ploughed once in the autumn and two or three times in the spring.² Couch

¹ A.G.A.D., A.Z., no. 99, ff. 989–90: 'Stan gospodarstwa dowspudzkiego dóbr jaśnie wielmożnego jenerała hrabi Paca dziedzicznego', 1817. This hand-written report on the Pac estates was read and discussed at the meeting of the Agricultural Society in Warsaw on 12 and 13 March 1817.

² Olszewski's report is not only a description of the field operations which he had observed but it includes information picked up in conversation with Scottish farmers.

grass has to be harrowed out especially after the last ploughing; then, immediately after the harrowing the twitch has to be raked together into small heaps, burnt after a few days of good weather, and the ashes raked all over the field.

“*Sowing*. On land thus prepared deep furrows are ploughed with a Lithuanian *socha* [wooden plough] in parallel straight lines by skilled ploughmen; the distance between the furrows should be about an elbow [0.62 yards]. The ploughing can be done a day or two before planting and by the time of the planting the surface of the field will be like this $\wedge\wedge\wedge\wedge\wedge$. At the actual planting a country waggon filled with manure, (the best is unrotted strawy manure) goes along the furrow, leaving every few yards small heaps of manure. On a Lithuanian *morg* (0.6 acres) 100–300 one-horse cart loads might be necessary, depending on the fertility of the soil. Behind the waggon walks someone with a two-pronged rake (*kruk*) or with an ordinary rake to spread the manure into smaller heaps, while several more people are occupied in spreading the manure continuously in the furrows, so that it lightly covers the bottom of the furrow as evenly as possible everywhere. Next someone brings the prepared potatoes which are cut into half—a method that saves some seed without diminishing the yield. Having thrown the potatoes into the furrows, a few inches apart throughout the whole length of the row, the ridges are ploughed down from both sides and covered with earth by an ordinary *socha* so that where formerly the ridge was high there remains a furrow. The surface of the ground once again looks as it did before planting: $\wedge\wedge\wedge\wedge\wedge$.

“Because of the large size of the fields the planting of potatoes in Dowspuda usually lasts from the 1st to the 30th of May. In the first days of June when the fields begin to look green with growing weeds, they are harrowed across the ridges with a wooden harrow, irrespective of whether the potatoes have already started shooting. In the second half of June when the weeds again start to grow, the fields are hoed with a one-horse weeder between the rows of potatoes which by this time have already risen a few inches. The following week the earth is turned and the rest of the weeds growing closer to the rows of potatoes are uprooted with hand-hoes working from both sides of the row. This work is done by girls or even by children who walk along the rows and gather up the earth as close as possible around the potato shoots.

“In the beginning of July the potatoes ought to be ploughed round with a one-horse ridging plough with two mouldboards made of cast iron or wood shod with metal. This throws earth from both sides onto the potatoes that were previously disturbed by the weeder and the hoe. As a result the surface of the ground once again looks as it did at the time of planting $\times\times\times\times\times\times$.

Ploughing like this is continued every two weeks so long as weeds continue to shoot, but usually one ploughing is enough; after this the now well-developed potato starts to flower and needs no further ploughing.

"*Potato-harvesting*. First the field is ploughed with an ordinary *socha* of two *soszniki*¹ which should sink in deep enough to reach the middle of the row of potatoes. Afterwards people on foot pull out and shake off the foliage, gathering up the potatoes and carrying them back to the Scottish carts which take them to the villages to be stored.

"*Potato-clamps*. Trenches should be dug in a place which will safely keep out water, a foot deep, four to eight feet wide, and several dozen feet long. It should be filled with as many potatoes as one can find room for, piled on top of each other. Afterwards the whole heap is covered with dry, chaffed straw so that after pressing down, the layer is at least five to six inches thick. On the top of the straw earth is strewn, not only the earth that has been dug out of the trench, but also earth from the sides, around the clamp. In short, a small trench is dug around the clamp and the earth shovelled on top until it lies about a foot thick on top of the clamp. It is then rammed down with spades, lest rainwater should filter down from the top to the bottom. If there is any danger of the rainwater flowing down the sides to the bottom of the trench, it is better not to dig one but, having strewn the clamp with earth above the level of the ground, to cover it as already described. It is advisable to lay down some straw litter at the bottom of the potato clamp, provided that the straw or the potatoes themselves are not wet at the time. If snow should fall before the earth covering the potatoes has frozen, the snow should be at once cleared off, thus preventing it from soaking into the clamp. If the potatoes should start rotting in the clamp, steam will be seen coming from it. Then it must be opened up at once, the rotten potatoes removed, and the rest covered again with dry straw and earth, or else removed to a cellar."²

The above description of methods of potato cultivation were new not only to local Polish landowners but even to graduates of the Agronomic Institute of Vilna. The use of a ridging plough in ploughing out potatoes deserves special attention, since this method did not really catch on in Poland. It is true that in the eighteen-fifties on some Polish manors a ridging plough of the Lawson type was put to this use, but experience showed that it damaged the potatoes and left a considerable number of them in the ground. Therefore where mechanical diggers (*koparka*) are not used, the peasants continue to

¹ *Soszniki* are the wooden spikes of the *Socha*, a primitive, wooden, chisel-like tool.

² W.A.P.L., A.O.Z., no. 4285, ff. 70-2: J. Olszewski's report about the farming of the British farmers on the Dowspuda estates, 1826. The schematic drawings are reproduced here as they appeared in the text.

this day to dig out the potatoes with hand hoes. The ploughing in of fertilizer after the potatoes had been sown in rows did not catch on in Poland either. On the other hand, the storage of potatoes in clamps, following the method described above, is still used today in Polish villages, with the difference that the pits are deeper and the layers of earth and straw covering the potatoes thicker than those used by the Scottish farmers in 1825 in Dowspuda.

In the years 1817-18 the Scottish and English farmers in Dowspuda introduced the following crop rotations varied according to soil conditions. On sandy lands a six-course rotation was practised.

1. Potatoes sown on the fallow after manuring.
2. Rye or barley undersown with white clover.
3. Clover ley for sheep grazing.
4. Clover ley.
5. Ley ploughed out and sown with rye.
6. Rye.

On mountainous and on marshy lands a five-course rotation was introduced:

1. Potatoes on fallow after manuring.
2. Barley undersown with red clover.
3. Red clover for hay or grazing land for cows.
4. Clover ploughed out and sown with rye.
5. Rye.

On wet loams lying farthest from the farmsteads a four-course rotation was observed, thus:

1. Bare fallow.
2. Rye or sometimes wheat.
3. Spring crops, sometimes peas and vetches.
4. Fallow to serve as grazing land for cows because of the great abundance of small plots of natural meadows among the fields.¹

Apart from the improved tools and agricultural machines produced in local workshops the farmers used local ridging ploughs and so-called Lithuanian *sochas*, the same as those generally used by the local peasant population. These implements were drawn by horses and oxen raised specially for the purpose on the immigrants' holdings. To save timber, wooden fences between tenants' plots were eliminated and replaced by ditches, or by quickset hedges of thorn and briar. Moreover, many new roads were built on the estates and roads previously built were put back in repair. Although the population of English and Scottish dwellers on the Dowspuda estates was about 500 persons in the eighteen-twenties, the individual farmer still kept some Polish servants in addition—2-5 workers, depending on the size of the farm and on the intensity of livestock breeding.²

Amongst the livestock bred by the settlers the greatest number of cattle were of "foreign" purebred type which, thanks to scientific methods of breeding and feeding, differed visibly from the cows kept by peasants in the neighbourhood. For instance, an English farming family, called Berth, was already keeping as many as 75 high-yielding cows in 1817. In the same year

¹ *Ibid.*, ff. 69-70.

² *Ibid.*; A.G.A.D., A.Z., no. 99, f. 989; no. 100, f. 802.

in the course of less than four months the Berths had produced from the milk of these cows large quantities of excellent "Cheshire" cheese which brought them a sum of 9,800 *zlotys* (£233 8s.), while the butter they produced fetched 720 *zlotys* (over £17). As the years went by, the production of "Cheshire"-type cheese was started on every farm. As late as 1865 we come across remarks about the mass production of this cheese on the Scottish and English farms of the Dowspuda estates. The production of this cheese, very much in demand in Poland, and also of high-quality butter, brought substantial gains to the local settlers.¹

The farmers on the Dowspuda estates also bred a fair quantity of thoroughbred and improved sheep. Soon after settling in in 1817 the number of Spanish merino sheep kept by the Scots and the English reached 2,500 head and in the following years the number had grown to over 7,000. The high-quality wool obtained from these sheep was much in demand at the Warsaw markets. It was also sent to Great Britain by English merchants travelling to Warsaw or else visiting Dowspuda itself.²

Together with the farmers, some skilled craftsmen (mainly Englishmen, accompanied by their families) arrived at Dowspuda. Amongst them was a wheelwright and joiner, named Pritzer,³ two mechanics, named Douglas and Robertson, two English tanners, and several locksmiths and blacksmiths. They quickly established workshops to meet the needs of the settlers and of the whole estate of Dowspuda. General Ludwik Pac supplied them with free building materials to erect living quarters and farm buildings in addition to which each of them received small parcels of arable or grazing land. On these parcels the craftsmen set up vegetable gardens and orchards, while their cows and sheep grazed on the pasture lands. Within eighteen months, i.e. in 1816 and 1817, they had made the following machines, agricultural tools, and household accessories for the settlers and the whole estate:

"1. Two costly machines for the threshing of grain, on the best Scottish model, each of which could thresh out 8 stacks of rye or 12 stacks of legumes in an hour.⁴ One of these machines alone threshed out 12,000 stacks a year which saved 6,000 working days, the time that would have been needed for threshing out a similar quantity of grain by flails.⁵

¹ A.G.A.D., A.Z., no. 99, f. 992; Kaszewski, 'Ruiny zamku w Dowspudzie', *loc. cit.*, p. 4. The English form of the surname, Berth, is probably Burt.

² A.G.A.D., A.Z., no. 99, k. 990; Kaszewski, *ibid.*

³ This is almost certainly the surname, Price, which in Polish would be pronounced Pritzer.

⁴ A stack of grain in old Poland comprised sixty sheaves but its size depended on the size of the sheaves, on the type of grain, the number of weeds, etc. as well as on the industry of the workers who tied the sheaves together. Therefore it would be difficult to establish the size of one stack.

⁵ At this time a worker could thresh out with flails an average of half a stack of grain during

"2. Eight riddles (*arfy*),¹ each of which could sieve about 50 Warsaw *korzec* (176 bushels) a day.

"3. A hydraulic press, brought from abroad at considerable cost which served to press oil from rape and other seeds, for use in cloth manufacture. It was also used for winching out the thickest trunks and roots from woodland with the greatest ease, requiring the aid of only one man.²

"4. A machine for washing linen, generally used in barracks and hospitals in England.

"5. A mechanical mill for the felting and cleaning of cloth.

"6. A horse-mill³ for paring bark.

"7. Several chaff-cutting machines.

"8. A machine for peeling potatoes.

"9. Machines for lifting great weights, and many other machines and tools to lighten the manual work of servants, and to improve the work of the distilleries; two-wheeled carts called *dziankar* for loading logs of wood and requiring one man only; machines of a new kind for winnowing grain.

"10. Four double machines for the sowing of turnips and two for sowing peas and beans. These were exhibited by the English wheelwright, Pritzer, who, in spite of a long illness, which caused serious delay to his work, also produced

"11. fifteen ploughs of different sizes and for different uses.

"12. Two large cultivators, called in English grubbers, and in addition, a large number of wheelbarrows, harrows, weeding hoes, two-wheeled carts, and other agricultural tools to ease farm work. Finally, mention should be made of the most important items of equipment, namely, large patterns which have been made with great skill, and with the help of which one may at a moment's notice cast spare parts for sawmills, mills, threshers, oil mills, corn mills (*krupiarnia*), fulling presses, paper mills, chaff-cutters, *arfy* (riddles) etc. The English locksmiths and blacksmiths are not only carrying out their tasks as perfectly as possible, *but even train students in our country who have in them the best possible teachers.*"⁴

a ten-hour working day. Threshing with a flail was done invariably by four workers in a barn and the author of the description took one working day of four threshing workers as a basis for calculating the saving achieved in threshing by the Scottish thresher in Dowspuda.

¹ *Arfa* is a wire net, stretched out on a wooden frame, surmounted by a basket through which seed was poured. In Poland *arfas* with wire nets or those made of narrow strips of leather began to be used only from the second part of the seventeenth century onwards.

² The machine arrived in 1816 from England in pieces and mechanics in Dowspuda had only to assemble it.

³ A horse-mill (*młyn koński*) here means an appliance for paring the bark of the oak-tree; it was moved by a wooden treadmill to which horses were harnessed.

⁴ A.G.A.D., A.Z., no. 99, ff. 990-1.

If we consider the short time in which all this had been achieved, the production of these small English workshops was impressive and understandably created a sensation amongst the neighbouring peasant and landowning population. The construction of two of A. Meikle's large fixed-drum threshers was an especially fine achievement—they were among the first threshing machines of this kind to be built in Poland. Indeed, the event was mentioned in the press: the anonymous correspondent of the agricultural review *Izys Polska* reported the news in the following manner thereby greatly arousing public interest:

"I have heard of a precision-built and very useful English threshing machine which now exists in Poland. It is, apparently, on the estates of General Count Pac, who, having introduced all the equipment of an English farm, has copied it down to the smallest detail. This splendid and in its way unique achievement, accomplished at great cost, well deserves publicity. There is one thresher for the whole estate, set up at its centre. All grain from the entire estate is brought to this point, and stacks or rather small heaps are made ready to be threshed out by the machine at a convenient time. Whether much time or much grain is lost by transporting it from distant places, I would not know."¹

Both the thresher and the system of stacking reaped grain into stacks around the threshing barn followed almost exactly the descriptions of Scottish farming which were published at that time by Polish landowners who had visited Britain.² To the description quoted above we may add that the machines made by English craftsmen in Dowspuda excelled in durability and productivity. Judging from references in the press, certain machines, especially the threshers produced between 1817 and 1820, were still working faultlessly in 1865; they had been in constant use in Dowspuda for more than 45 years.³ More than this, it should be stressed that the English craftsmen living on the estates did not hide their skills jealously, practising them for their own profit alone; they trained Polish pupils to build tools, agricultural machinery, and industrial appliances, thus making a contribution to the technical progress of Polish agriculture. Nor did the inventiveness of these specialists stop at making the above-mentioned machines and tools. Other written sources inform us that in 1817 the English craftsmen finished work on a

¹ O młocarniach (korespondencja), *Izys Polska*, no. 11, vol. III, Warsaw, 1820, p. 454.

² See, for example, D. Chłapowski, *O rolnictwie*, Poznań, 1875, 4th edn, with an addition of letters about farming written from Scotland and England in 1815 and 1819; A. P. Biernacki, 'Pod jakimi względami ważna jest rolnikowi polskiemu znajomość gospodarstwa wiejskiego angielskiego', *Gazeta Wiejska*, Warsaw, 1817, pp. 153-6.

³ Kaszewski, *loc. cit.*, p. 4.

modern sawmill with 12 saws, and supplied the technical equipment for a tannery which was later run by two qualified tanners brought from London. Furthermore, equipment was built for a brewery which began producing beer in 1817 which "equalled the best Bavarian beer, and imitated English beer." The productive capacity of the brewery was 4,000 barrels in a year; the raw material, hops and barley, was supplied from the farms of British settlers and from the manors which remained under the management of General Pac.

Early in 1818 a personal acquaintance of Pac visited Dowspuda. He was an Englishman, called Riad,¹ owner of a large English cloth factory. He entrusted his business to the care of his eldest son, while he himself undertook the organization, construction, and mounting of the technical equipment required for a similar factory for the bleaching of flax and linen to be set up in Dowspuda. The parts required for the factory were imported from England. This plant was working under the management of Riad and other English masters for eight years, until 1826 when it was closed down for lack of sufficient quantities of raw material.²

As we can see, the plans realized by Pac with the help of English experts for the industrialization of his estates together with the expansion of agricultural production were bold and sweeping.

The British colonists and craftsmen in Dowspuda won for themselves respect and recognition from the peasants and landowners of the neighbourhood. Hence their assimilation into their chosen country took place very quickly. Nevertheless, they kept their different customs for decades, at the same time maintaining their high standards of technical competence and their relatively high intellectual standards. According to contemporary accounts: "the customs and ingrained habits of the Scots, especially of those who have always tilled the land, are irreproachable. They like Polish spirits but they dilute them with beer, water, and other liquids and, on the whole, they are very thrifty. In working on the land they are much more industrious than the native peasants. . . For ploughing they use horses most often and a plough, keeping local lads for the *socha* and the oxen. . . Finally, it is extraordinary that although they undertake the lowliest jobs on the farm, each of them can write and count and some even have collections of all kinds of books, and read them from time to time."³

Here is yet another opinion about the British settlers in Dowspuda: "The

¹ This is probably the surname, Read.

² A.G.A.D., A.Z., no. 99, f. 992; Słownik Geograficzny Królestwa Polskiego, vol. II, Warsaw, 1881, pp. 136-7.

³ A.G.A.D., A.Z., no. 100, f. 802, 1821.

population has been much increased on these estates by industrious people who know all about the proper cultivation of the land and also have a knowledge of the smaller crafts which are practised in the villages; this opens up great possibilities not only for the squire but—one might say—for the country too, since these people furnish an example of industry and diligence, and only by the practice of such virtues can our domestic farming be improved.”¹

As the years passed the English and Scottish farmers and craftsmen in Dowspuda mixed with the local population more and more, losing their distinct national and religious traditions and customs, but preserving their reputation for industry and enlightened expertise. In 1856 the following account was written of the descendants of the first British settlers in Dowspuda: “In these parts there are to this day naturalized descendants of those newcomers, and a spark of their fathers’ customs, language, and knowledge continues to glimmer amongst them. One can find here an excellent cheese, named ‘Cheshire’ after the place of its origin and the method of its making, as well as other products of the farming business which they learned from their ancestors.”²

Thanks to the efforts of the great agriculturalist and patriot, General Pac, a thriving centre of technical progress in agriculture was created in 1816; a nucleus of scientific farming was transplanted alive from Scotland and England. The British settlers taught the local population how to cultivate the land efficiently; how to raise purebred and high-yielding cows and improved sheep; how to construct and use to best advantage their perfected agricultural tools and machines; and finally they taught thriftiness and economy. Still, the advantages were not all one-sided. The Scots and the English received in Dowspuda fertile lands and financial help in the form of building materials. They could, without any serious restriction, use the resources of the woodlands (firewood and timber for building, fungi, blueberries, raspberries); they had permission to hunt in the spacious forests in the area which abounded in game; they could also fish in the rivers and lakes. Low ground rents and state taxes, their freedom from all forms of exploitation, the sympathy of the local population—all this created favourable conditions for productive farming, even for prosperity. Thanks to their great skill in farming, they were able to take good advantage of these opportunities.

The history of this hitherto unknown centre of British agricultural settlement in Poland, from which agricultural knowledge and technical progress spread afar, serves as yet another example of the British contribution to agricultural advance in the old Kingdom of Poland.

¹ A.G.A.D., A.Z., no. 99, ff. 992–3, 1817.

² Kaszewski, *loc. cit.*, p. 4.