COTTAGE INDUSTRIES: WITH SPECIAL REFERENCE TO THE LACQUER INDUSTRY OF BURMA*

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The CHAIRMAN: Ladies and Gentlemen, I have the peculiar position—I do not know whether others in this room have it—of belonging to both the Societies which are collaborating in this meeting, the Royal Central Asian Society, and the humbler but still useful body, the Indian Village Welfare Association. It is rather a happy occasion that we have met for the first time in unison, finding in Mr. Morris and his subject a person and a question of interest to both Associations.

Mr. Morris was for many years in Burma, first of all as an irrigation engineer. He then became Provincial Art Officer, but after that he did great work at the Insein Technical School, and proved—what had hitherto been doubted by many people—that the peoples lying between India and China are not by any means either lazy or devoid of practical manual skill. I believe, when he first went to that school, the majority of the people were not of the Burmese race, but when he left the large majority were Burmese. That is a considerable achievement. The same thing has been done in Malaya. But it depends on having the right man in charge of it, the man who keeps them to their work, and at the same time is friendly with them and is keen on his job.

Now let us ask him to tell us about it.

THE subject of this paper is "Cottage Industries: With special reference to Burma." Without taking undue advantage of the freedom left me by the title, perhaps I may be excused if I deal briefly with the general subject of cottage industries, their origin and development, before making special reference to Burma.

Cottage industries have, of late years, attracted a good deal of attention not only in India but also in this country and elsewhere. If we are to form any clear idea of their possible future, it is suggested that we must consider their past history and study their growth, firstly, in general terms, and, secondly, in detail for each particular industry.

On reading through the reports of efforts which have been made to foster cottage industries, it becomes obvious that there has been some lack of definition for the term. This is natural enough when we con-

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sider that the urge to take action may have had a variety of origins. It may have been due to a desire to improve the income of cottage dwellers; it may have been the result of a sense of discomfort at the displacement of locally made articles by imports; the narrowing demand for some form of skilled labour may have caused dismay; or, again, a belief that the old methods produced articles more beautiful than is possible under modern conditions of manufacture may have been the driving force. These are different lines of approach and may lead to different conceptions of cottage industries. The emphasis in this paper is on their economic value.

Perhaps the best classification would be those industries which do not include agriculture or domestic work and which can be undertaken in the village home as a part or whole-time occupation, without any necessity for factory organization. But a consideration of this classification will show that it is not a definition, and this is very significant.

For in Burma, at least, if we are to accept the scope of the investigations made by the Superintendent of Cottage Industries, a cottage industry may be undertaken in an urban area; and while an occupation such as potting may be limited to one or two workers in one area, elsewhere it may occupy the attention of a whole large village; from that to a factory organization is only a step in co-operative effort.

The importance of cottage industries is largely relative; the more primitive the life of a community, the more nearly we approach to an area in which cottage industries are of prime importance. In its simplest form presumably the family was a complete unit, able to perform all the operations necessary to its existence; but all development has involved a growing interdependence and with it a tendency to specialization. The need for implements for work in field and forest, and apparatus for domestic purposes, quite apart from weapons of defence and attack, produced a demand for craftsmen of particular kinds. The result of specialization was greater skill, and the reward of increased skill was enhanced receipts, whether in kind or in power is immaterial for the moment. This is the beginning of cottage industries.

It may be said of any industry that it had its origin in the coincidence of certain conditions. There must have been a craftsman with vision, there must have been the necessary material available, and there must have been an appreciative public. Without these three conditions an industry would never have been started or it would have died stillborn.

Similarly, the continuance of an industry and its growth depend on

a continued supply of materials and labour, demand for its products and adaptability to meet ever-changing needs. These are vital conditions as important to-day as in the past; if any one fails the industry will collapse.

Assuming the conditions necessary for its birth the nature of the industry will force its development along certain paths. If it calls for particular skill, hardly acquired, the tendency to specialization and whole-time occupation will be more marked than in the case of an occupation easily learned.

Among the whole-time occupations the demand within the economic radius of distribution may be insufficient to support more than one craftsman; the village blacksmith is a case in point. On the other hand, factors may appear which encourage grouping, as, for instance, in pottery; for, except in the lowest grades of work, to reduce the expenditure of fuel large kilns are necessary. This need reacts in grouping the potters, for one man cannot easily fill a large kiln in a reasonable time.

The tendency to grouping is not new in Burma; there have for a long time been well-established villages of potters, ironmakers, lacquer workers, wheelmakers and others, which illustrate this natural trend. When such a whole-time industry grows, one of two things must be happening:—either the radius of distribution has increased or the output has become more popular within a restricted area.

Difficulties of distribution restrict this tendency, but of late years the motor-car has been such a potent agency in the reduction of time-space that the convenient radius of distribution has been widened, and this must encourage grouping.

Almost inevitably growth necessitates repetition work, while with the introduction of repetitive work and the demand for quantity, the use of mechanical appliances will receive emphasis. We hear a good deal about the dulling effect of monotony, and there may be some limit beyond which monotony becomes undesirable, but if an industry serves a social purpose, surely one of its functions is to make available to a wider and wider circle any particular article manufactured. Moreover, as an industry grows it draws in an increasing number of workers, and not every worker possesses initiative and imagination; far from it. It is doubtful whether it would be a social advantage to have too many innovators in an industry. If we are to judge by the natural tendencies exhibited by industrial workers, monotony is not the evil thing it is sometimes represented to be; there

is much less effort required, much less wear and tear in doing the same thing over and over again, and the worker who works for a return welcomes reduced wear and tear.

Indeed, the outcry against monotony often has its origin among good folk outside the industry who, themselves restless, would impart this restlessness to the craftsman. Certainly within an industry the movement is towards repetition as the path of least resistance; it follows the natural law of minimum effort for maximum effect. This can be illustrated from any natural industry.

Left to itself it will go still further; it will develop all the features of a Ford car industry, one worker will concentrate on a particular item and pass on the partially finished article to another. For instance, in the umbrella industry in Mandalay the work is subdivided: one man cuts the spools, another makes ribs, another sticks, and so on to the final assemblage, and this has developed from choice as the most convenient way of dealing with the matter.

Thus the trend of the cottage industry is towards larger industrial groups. The search for economy of effort or its corollary, greater production for the same effort, will encourage a gradual concentration, and it becomes a question whether it is necessary or desirable to resist it.

The industrial revolution drove workers into large factories, partly because it was only possible to supply power in comparatively large units. It is interesting to speculate whether in the fact that we can now transport power cheaply and make small units of power available, per the electric motor, in individual homes, we may have a means of reducing the necessity for large factory buildings.

This would not apply to heavy industries, where concerted action is necessary, and it would not greatly retard the grouping tendency; it might be more pleasant for the worker, though it is open to question whether it would really increase domestic felicity for the worker to carry on his manufacture by his own fireside.

There is an advantage in some degree of grouping from the point of view of marketing the material. Salesmanship has a tendency to sell itself at an overestimated figure, but salesmanship and all that goes with it in the way of distribution and delivery is a special craft for which the producer of the goods often has not much ability.

The part-time occupations suitable for cottage workers become, therefore, more and more limited in number. Generally speaking, they will be occupations requiring comparatively little skill, occupa-

tions which will not be hampered from a trading point of view by an irregular flow of output, and possibly they will be most likely to succeed where the output will be used by the craftsman himself or herself or in a comparatively small circle of distribution. Weaving, basket-work and mat-making are examples of such industries in Burma.

This is not a pessimistic view, but in supporting the growth of cottage industries it is necessary to face facts if we are to avoid misfits.

But if these cottage industries are subject to the ordinary laws which govern industrial development and wax or wane as they succeed or fail to be of service to the community, why worry?

It cannot be denied that cottage industries have shown a general decline during the last few decades, and a good deal of time and effort has been spent on their encouragement and revival.

This effort has been made on various grounds which may be classed as economic, social, æsthetic, and sentimental.

The strength of the urge to preserve cottage industries on economic grounds varies widely. In Burma the agricultural season is short and for a great part of the year there is little to do. The reward of agriculture under these conditions may have been sufficient when the amenities of life were fewer, when the standard of living, so measured, was lower, but the reward is now insufficient to supply the demands of the agriculturalist. Yet half-time employment cannot hope to secure the same wage as whole-time employment under equal conditions of skill, hence for these people some extra occupation is desirable. This applies particularly to the dry zone of Burma. It is true of other Provinces as well, and the disappearance of secondary occupation in the villages is regarded as a disaster by those who are concerned with village life in India.

It does not, of course, follow that the only remedy for the meagre income of the villagers, measured by modern standards, is to be found in part-time and secondary occupations. If the agricultural department are successful in widening the Burman's outlook and can find in other crops, or possibly in stockbreeding, sufficient occupation for the whole year and a sufficient remuneration, the economic need for subsidiary industries disappears. At present the Burman agriculturalist is perhaps too inclined to put all his eggs in one basket.

In a country such as England, on the other hand, the economic demand for a revival of subsidiary industries might be—just zero. For *if* it be true that mechanization has brought manufacturers to the saturation point and that the solution of *our* unemployment

problem is to increase the leisure time of the employee, then obviously while some form of occupation for that leisure time may be desirable, it must not have the effect of reducing demand for the products of the existing industries. The revival of subsidiary industries will be rather in the direction of providing a hobby. In Sweden, apparently, home industries have survived in this form, much time being spent in those pleasant leisure-time occupations which enhance the appearance of the home, with possibly some local interchange of the products of their hobbies; this is all eminently desirable and can give much satisfaction to the individual, it will stimulate æsthetic feeling, but it partakes more of the nature of a social development. In England the main outlet seems to be not so much in the house as outside; to those who can look back to the condition of small homes at the end of last century, the difference in the gardens is a striking and encouraging sign that increasing leisure need not be the downward path to degeneracy.

This reason for the preservation of cottage, or, to use a wider term, home industries, is more of a social question, and a very important question too. The social, intellectual and moral value of hobbies is inestimable and the economic value fades into relative insignificance, but discussion of this aspect is outside the scope of the present paper.

There is a special feature in the social value of cottage industries which, if not peculiar to Burma, can at least be urged as a cogent reason for encouraging them in parts of that Province. Mr. English, the father of co-operative effort in Burma, wrote:

"I take it that one of the chief causes of crime in this Division (the Irrawaddy Division) is the fact that it is a one-crop area in which one-yoke cultivators can hardly make ends meet. They consequently require subsidiary crops to eke out a living. Further, subsidiary industries would, while improving their economic condition, keep agricultural labourers employed throughout the months when agricultural employment cannot be got."

The womenfolk are at the bottom of the trouble; they will not look at a young man who has not got a bit of raiding to his credit. It is the off-season in agriculture which provides the idle hours which Satan is said to find so useful to his purpose. The condition was at one time not unknown on the marches of Scotland and Wales. The more even distribution of the working season and the permanent invasion of England by tribes from the north and west have been responsible for a decline of such practices in this country. This lack of occupation in the off-season does, however, provide a social problem

in Burma as urgent as the provision of right occupation for increasing leisure time in England.

The tendency to grouping in whole-time industries already mentioned makes for urbanization of population, with its defects. While we are learning by grim necessity that urbanization is undesirable if carried far, I suppose that some measure of urbanization will take place even for the agricultural labourer, who will, as roads improve, seek an urban home, travelling to his work each morning by mechanical means; indeed, this movement might proceed faster were it not that flocks must be moved and milked and we have not yet bred cattle on wheels. In this urbanization Burma is, if anything, in advance of England, for the agriculturalists collect in villages and there are no outlying farms.

As a transition measure the preservation of cottage industries may be urged on both economic and social grounds. For as a craft moves from its early stages to its development as a great industry it is more important to preserve the craftsman than to evolve a scientific adviser. Heredity plays as large a part in manual skill as in any other form of skill, and any training or education scheme which discourages continuity in hereditary craft ability does a social disservice to the community.

The æsthetic demand finds its justification in the fact that all craftsmanship at its highest results in the production of objects with æsthetic appeal; a master craftsman will tend to produce an object which has æsthetic value.

If, however, this æsthetic appeal is put in the foreground, the tendency will be to seek revival of a declining craft by the provision of an art school and to expect too much from such a provision. For an industry does not live on show pieces only. The real master craftsman is, in fact, a sport, or freak, appearing as an occasional phenomenon among a mass of ordinary workers, and unless the industry can support this mass of workers the chances of a genius appearing are reduced in proportion to the reduction of the mass.

This applies to the isolated workers also, for it is only an occasional village blacksmith or other craftsman who will produce works worthy to endure.

Again, a master craftsman is only likely to have the real qualities which make his work admirable if he has been through the mill, starting with the simplest products, the utilitarian objects by which the industry earns its daily bread. For it is by long experience, and

but little by teaching, that he acquires that knowledge of the touch and feel and appearance and smell and taste of his material which must become ingrained and intuitive before he can launch out into original work. Dreams only come true when the dreamer has a background of intimate personal experience.

Far be it from me to deprecate the provision of art schools, but they can hardly be expected to be very effective in the preservation of an industry.

Some mention should be made of art and craft exhibitions. The annual exhibition of arts and crafts held in Rangoon was started by Mr. Tilley in 1885, and continues to be held. This has provided a great deal of assistance to craftsmen in a Province such as Burma, where the craftsmen are scattered in many cases away in inaccessible villages. They secure a market for their best wares, and this gives a fillip to the industry.

From the æsthetic point of view the result is somewhat mixed. A good many suggestions made by visitors are not altogether successful. The woodcarver is induced to produce much-carved tables which are veritable dust-traps and most unsuitable as tables, or chairs which—since he never sits on a chair himself—appear as prickly monstrosities that can only be sat on at the user's peril. The same remark applies to other crafts. It is striking how necessary it is that the craftsman should be familiar with the use of the article which he makes. One instance may be mentioned: a metal worker was asked to produce some fish knives for a dinner service, and although he was shown one and given a sketch the result was useless, the handle being far too thin and uncomfortable to hold, while the whole object was out of balance. Yet the same man produced a betel-nut cutter which was admirable in every respect.

The sentimental point of view is the most difficult to define, the most elusive when it comes to pinning it down to a logical argument. One might often accuse it of being, quite unintentionally, selfish. It may arise from a dislike of some political standpoint and find its expression in an attempt to drive the villager back to the spinning-wheel, regardless of the fact that he will be poorer in the result; it may arise from patriotic motives and inhibit the villager from obtaining imported articles quite regardless of the fact that the villager, if left to himself, would buy those articles because they save him time, trouble and money. It may express itself in an admiration of some rustic cottage and demand its preservation, although this means that

someone else will, by living in the cottage, be deprived of some of the amenities of more modern structures; or the picture of an old woman sitting at her lace pillow, peering at her work by the light of a candle focused through a glass globe, may seem too attractive to resist, and a return to lace pillow work is advocated *as an industry*, although the earning power under these conditions may be less per day than would be obtained by other means per hour.

Yet if one wants to raise money for the support of a movement, the sentimental bait is the most effective, whether the appeal be to private individuals or to governments; indeed, public bodies are more susceptible than private individuals.

From a general consideration of the conditions which mould cottage industries may we now turn to a detailed consideration of certain specific cases.

First of all, I propose to take the case of the Burma lacquer industry, for it is an industry which we can trace through its most primitive stages up to an advanced degree of development. It has both an utilitarian output and, in its best wares, a measure of æsthetic appeal: it has appreciable economic value as a subsidiary industry, for it is the mainstay of many part-time and some whole-time workers in a comparatively arid region: its preservation should make a sentimental appeal to the Burman, for in some of their forms the products are unique: and it is in danger of extinction.

The story of the industry starts with a need for better containers. All communities are faced with a need of vessels for storage and transport; this problem is as important to-day as it was in the past.

The primitive community in Burma had at its disposal basket-ware, probably, even at a very early date, crude pottery, and, as an alternative, especially for liquids, lengths of bamboo and other natural objects hollowed out. To this some early inventor added lacquer-ware. He found that the grey juice exuding from the bark of a certain tree applied to his basket-ware turned black in drying but greatly improved the ware. Smeared on to the work this material, called *thitsi*, acted as an adhesive and preservative, strengthening the joints, helping to hold together the weak parts, stopping unravelling, protecting the material from rot, and even acting as a waterproofing.

It does not need very much imagination to see what an improvement this was, what an advantage the new ware must have had over the old, and once prejudice had been overcome we can see the inventor or his imitators waxing comparatively opulent.

Of course, there would have been detractors of the new ware, especially among the other workers. The æsthetically minded would compare the dingy colour of the new ware with the clean beauty of the old slivers of bamboo or reed. Social economists would point out that *thitsi*, by giving greater lasting value to the wares, would produce unemployment, and technical experts would be called on to find some reason against the use of *thitsi*—some probable slow poisoning of the community. But the thrifty housewife, while deploring, with other gossips, all these changes, would introduce one or two of the new vessels into her home, maintaining that a hard-working woman must do the best she can, though, of course, the headman and his set ought not to encourage any novelty that would take the bread out of the mouths of poor folk.

No live industry stands still, and further improvements were made. By mixing the *thitsi* with ash or other fillers a soft putty was obtained which could be wiped over the surface of the basket-ware, filling the interstices, and converting it into a watertight vessel. The desire for better markets or the instinct of a craftsman to improve his output, whichever you will, but probably both, led to progressive changes. The coarse filling was smoothed over and a coat of pure *thitsi* was applied, giving a glossy black surface. From this to the use of pigments was a natural step, first in the way of self-coloured surfaces and then as patterns. Alternatively the *thitsi* putty was moulded to give a fluted surface reminiscent of the gourd which the craftsman was accustomed to use as a hollowed vessel. A different and probably much later method of ornamentation was a sgraffito design, formed by scratching the polished surface with a sharp scriber, and these scratches were filled with pigment forming either monochrome designs or, by successive series of scratches and different pigments, polychrome designs. The simplest of these sgraffito designs is an obvious attempt to produce on a smooth surface the high and low lights of a basket-work texture. It is exceedingly interesting to note how conservative natural design is, returning again and again to memories of earlier forms. The smooth surface was better from the point of view of usage, but rather monotonous in appearance.

The work described so far is all carried out on a framework of basket-ware, which sets some limit to the shapes available; rectangular boxes and similar shapes being difficult in this type of framework. In Mandalay, particularly, a branch of the industry developed in connection with the furnishing of *phongyi kyaungs* (monasteries) in the provision of chests and cupboards. To carry out this work it was

necessary to resort to a wooden base to which the lacquer could be applied. The craftsman accustomed to basket-weaving got rather out of his depth and the carpentry was generally very poor. The lacquer-work mostly took the form of moulded designs in *thitsi* putty applied to the prepared timber surface and was generally gilded. Often this was enriched with pieces of coloured mica or glass, producing very ornate work. From this to architectural work was a natural step, and on this bolder work the crude carpentry was less of a defect, but the lacquer-work was chiefly relegated to a secondary place as an adhesive for the glass mosaics and a framing round the individual pieces. In its own atmosphere and surroundings much of this work is exceedingly attractive, though it may be entirely out of place when translated to a European drawing-room. There was, however, in 1918 a beautiful monastery some miles south of Mandalay in which lacquer had been used with great delicacy for the moulded panelling, and from a European point of view the beauty was all the greater for restraint in the use of gilding. This monastery was in ruins and rapidly going to pieces in the jungle; it has probably disappeared by now. Yet when the Archæological Department asked for permission to save some of the panelling as museum pieces and thus keep a record of good work, permission was refused by the Burman trustees, who on religious grounds preferred to let nature complete the destruction. It is all the more to be regretted because there is no other similar example in a state of repair.

One other form of lacquer deserves mention: this is a smooth lacquer-work in gilded design which is used for small objects such as boxes and trays.

The output, as will be seen, varies widely in scope and quality, and enough has been said to show that the industry is important. A majority of the articles were widely used by the Burman—they were, in fact, domestic utensils, such as drinking vessels, platters, boxes, small low tables and the like—and while the more attractive articles gave an outlet for the master-craftsman, there was enough routine work available to provide occupation for several thousand workers, most of whom treated it as a subsidiary industry. The work was, moreover, subdivided, and the basket-work foundation was in many cases done by people who did not finish the application of the *thitsi*.

Yet the industry has failed to raise the lacquer worker to a position of a well-paid craftsman, with the natural result that the craft is in danger of extinction—not immediately perhaps; but if other occupations

pay better the younger generation will seek these more remunerative fields.

It is doubtful whether lacquer workers ever did make a good living; the labour of production is great, but the decay of the industry is due to certain causes, some of them general to village industries and some particular to this craft.

As a craft lacquer-work presents difficulties from the modern point of view. *Thitsi* is a wonderful material, it is acid- and alkali-proof, and a *thitsi* surface of a tray or other object is not marked by a hot plate or water jug. But each coat of *thitsi* takes about five days to dry, and a really good piece of lacquer-work may take several months to make owing to the pauses between each application. This means that either the craftsman must be paid in advance of final production, or he must wait a long time for the reward of his labour. In an industrial system such as that obtaining in village industry in the East the result is almost inevitably a low wage. In a factory, payment of wages in advance of realization of sales is usual, but even so it is seldom that sales lag several months behind the wage payments.

Again, the craftsman is more conservative than the purchasing public; he does not move so readily with the times. The Burman has had brought before him other wares—simple pottery, enamelled iron, and Japanese lacquer—which suit his present needs and purse better than the old-fashioned local lacquer; at least he seems to think so. It is probable that in the long run they are not so durable, but low cost will generally win against lasting value to-day. This is all very sad, but all industry must be prepared to face competition from alternative articles.

To help the lacquer workers, who are tucked away in rather inaccessible areas and consequently may need some information about competitive articles, two lacquer workers were brought down to the Government Technical Institute near Rangoon, and there they turned out novel articles to test whether their manufacture could be undertaken. The articles were comparatively simple. Toilet sets, wash-hand-basins, etc., were made in lacquer, and certainly there seemed some chance of these being a success. The jug presented a difficulty as regards the handle, not because a good solid handle was impossible, but because of that inherent difficulty in getting a craftsman to make an article which he does not understand himself. When the idea was passed on to the villagers they produced jugs with weak and entirely unsuitable handles, and looking back it seems obvious that it would have been better to make water pots rather than jugs. These would

probably have been quite as marketable and much safer. The price at which these articles could be produced was competitive. The men even produced a very successful and attractive bath tub, but this was a more ambitious effort. There were, however, quite a number of small objects of a type to meet modern local demands, which could be introduced to the lacquer workers as better paying propositions than their ordinary wares.

As a result it was proposed that this work should be extended by providing a centre of information in the biggest of the lacquer-working areas. The suggestion was that there should be an experimental station combined with a school for young craftsmen. The school was to be linked up with the ordinary system of elementary village education. The ideal would have been to put a master lacquer worker in charge, but none with sufficient width of outlook was available, and a young Burman who had received some engineering training and had subsequently shown initiative in working for himself instead of the Government was put in charge. He had two trained lacquer craftsmen and a carpenter on his staff, as well as a schoolmaster for ordinary educational work. It was quite a small affair and might have done well, but although it is still in existence the initial intention seems to have been forgotten to some extent. What is more obstructive to good results, it has lived continually under a threat of extinction: each year, according to the reports, the closing of the school has been mooted and a grudging sanction for a further year has been given. These conditions do not foster progress. For some reason the education authorities loaded the curriculum with English as a subject. The Principal, after several years, was given Irish promotion and his pay was cut by 25 per cent. In spite of this something has been accomplished in the way of helping the craftsman to adopt new ideas and to simplify his work. It seems to me that too much attention has been paid to the "art" ware end of the work and too little to the production of utilitarian products which will keep the industry going. This is natural enough on the part of a staff who had to comply with a demand to make a splash at the annual art exhibition, but it displays some lack of vision on the part of the higher control. I would venture to suggest that the effort to create an export market is not in the best interests of the industry at first—it should first seek to meet the market at its doors; an overseas market is much more difficult to obtain against local competitive articles in that market.

Some of the action taken may not be so pleasant to record, for

experiments have been made towards replacing *thitsi* by synthetic surfacing materials which will not have the same merits. This is distressing, but one must admit that setting sentiment aside it may be a right course. The aim is to provide occupation for workers with a particular type of skill, and for the popular market it may be necessary to explore the possibilities of other surfacing materials. It is a change, but one which preserves continuity in craftsmanship.

Lacquer is not by any means the only industry which has received or deserves attention. A good deal of effort has been made to revive the weaving industry. This is an industry of old standing, and practically every young woman used to weave simple cloth. The loom generally used was a narrow loom with a hand-thrown shuttle limiting the width of weave to about 22 inches, which in its turn had an effect on the designs of Burmese dress. Both cotton and silk were woven and the Burman used quite a lot of silk; but the silk yarn was imported, home-grown silk being unobtainable for religious reasons.

The weaving industry can be practised in the home, and it is remunerative without sales in that it saves expenditure of funds by providing a material for personal use by the craftsmen.

In 1912 the Saunders Weaving Institute was opened near Mandalay to provide instruction. One of the early changes made was the introduction of a fly-shuttle loom in place of the hand-thrown shuttle. This made it possible to double the width of weave and to increase greatly the output. No objection can be raised to this, but it should be noted that it was a change in the direction of reducing labour by the improvement of mechanical processes. It would be a very dead craft which did not accept improved tools and machinery as they were offered.

The Institute, under a Principal from India, has undertaken the training of weavers in the Institute itself; it has also sent out travelling instructors to help to establish local schools and classes. It has a technical section dealing with testing and other work. As a specialist institution it has been of great value to the Province, and can take credit for having accomplished much to preserve weaving as a part-time industry.

Yet weaving is said to be in a bad way. The Superintendent of Cottage Industries in 1936 reports:

"Weaving still forms one of the most important of cottage industries by providing an important subsidiary occupation to the cultivator's family during the off-times when he is not engaged in agricul-

tural work. Machine-made imported cotton cloth has largely replaced the hand-woven product, and hand-looms are not so much in evidence in villages as in olden days when every village maiden wove all the requirements of the family. The demand, however, still continues, and those who can weave either save something on their domestic needs or earn some extra money in their spare time. The only difference is that in these times the weaver makes no profit. He earns merely the wages of his labour."

That last phrase is repeated from a previous report. It is not quite clear what is meant or expected.

There are several other village industries in Burma with which there is no time to deal in detail. Each must be considered on its own merits, and the remedy will vary from case to case. Fine grass mats—very acceptable in Burma, though not much use for an export trade—small ironwork from Pyawbwe, the mother-of-pearl industry of Mergui, the stone workers of Pakokku and elsewhere, and many other cases provide opportunities both as subsidiary industries and also as the nucleus from which groups of workers might be drawn for more ambitious development.

We now come to the thorny problem of why cottage industries are failing to secure adequate wages for the craftsman and are as a natural consequence unpopular with the rising generation. I have already suggested that they never were very remunerative; but the relative remuneration of other occupations has risen, leaving them behind.

An *ad misericordiam* appeal to the public to support cottage industries is futile. It may be effective in producing an apparent stimulus such as we see at sales of work, where one dreadful example circulates from sale to sale collecting funds for charity in its course and so fulfilling its purpose; but that is not exactly helping an industry. External support if given must be justified, for an industry should exist by its own vitality and cannot live by artificial respiration.

At the outset it was suggested that three conditions were necessary: an adequate supply of craftsmen and materials, adaptability to meet changing circumstances with suitable methods and products, and an appreciative public. If any of these fail the industry must die.

Each of these terms needs some expansion, and by an appreciative public is meant one which will demand the wares in sufficient quantity and be willing to pay sufficient for them to make manufacture worth while.

Cottage industries suffer from certain disadvantages as compared

with organized factories quite apart from any question of mechanical processes. As they extend, or try to extend, all the intermediate stages between production and realization on sales become more and more important. Isolated or semi-isolated workers are at a disadvantage in the matter of collection, packaging, delivery, the obtaining and filling of orders, and the various processes which, in a factory, are the functions of the sales and accounts staffs. But any disadvantage under which an industry labours has to be paid for, and since the public will not willingly pay for it, and since it is questionable how far it is legitimate to make the public pay by expenditure of public funds, the cost comes back as a reduced remuneration.

The tendency to-day is to turn to the co-operative system as a life-line, and co-operation is not unknown in Burma. Co-operative credit societies started on their career in Burma about thirty years ago, but it was not until a good many years later that production and sales societies came into being. It must be admitted that their history makes melancholy reading; they had hardly time to get into swing before the world slump set in and one by one they have failed. There is one point which stands out in the yearly reports, and that is the reiterated statements that supervising officers were so busy winding-up old credit societies that they had no time to help foster the production and sales societies which needed help and advice. The doctors in fact were so busy in the mortuary that they had no time to care for the living. Further, as soon as an officer showed ability he seems to have been given the chance of a better post elsewhere. We cannot blame the individual, but the fostering of such a movement does need understanding and enterprise, and these come with experience. Frequent changes delay the course of progress and each delay deals a blow at the task of educating the craftsmen in business methods.

It is said that the Burman village craftsman cannot be educated in business ways. I do not believe it for one moment; the same remark has been made about the Burman as a soldier or as an engineer. It was suggested at a recent meeting of this Society that the Burman will not submit to discipline. I cannot claim personal experience in training the Burman as a soldier, but I do know something about training him as an engineer. Success in that direction, moreover, was not attained by spoon-feeding methods: the Insein Technical Institute provided a harder training than most; indeed, its success was largely due to an early elimination of the worms. Much depends on selection and the hereditary aptitude of the student.

It will, however, facilitate discussion to return to the lacquer industry as a specific case, for the conditions vary and the remedies differ in consequence from industry to industry.

The lacquer industry had its sales and accounts staff, for some of the wares were taken round the local bazaars by the worker or his family, some were taken over by merchants, who might be master-craftsmen, and they were sold in the bazaars of the larger towns such as Mandalay, Rangoon, and others. It is not fair to throw all the blame on the merchants and to accuse them of rapacity; they often had to advance money on poor security before the goods were made, and even if they took over finished articles they were often faced with considerable expense and delay in selling them. The output of the lacquer industry is too great for local sales by the craftsman's family, but the gap between the craftsman and his public is rather clumsily bridged and the toll is heavy.

Because times have changed too rapidly for the craftsman, some external help may be advisable to aid him in changing to more suitable wares. The lacquer school at Pagan was intended as an experimental station, and the Principal, with some higher assistance, might well do more to evolve marketable wares and test the demand for them. I suggest that the emphasis has been too much on art wares and a search for an export market. Art wares will not keep an industry going and the export market is a difficult market. Experiments in new articles for manufacture are a justifiable public charge at present; they need not involve much expenditure—indeed, it was intended that so far as making the articles and determining the construction were concerned, this would be the real work of the instructors and their pupils. My experience of the Burman craftsman is that he is quick on the uptake and able to adapt his ideas. A local bureau such as was suggested would be more effective than a central training institution of all industries, which is liable to be filled with students having no hereditary craft. Personally I consider that this emphasis on heredity is right and logical, though heredity may be physical or social; it may be the heredity of parentage or the heredity of early and continuous environment.

However unpalatable it may be to those who look on, the substitution of new materials in place of *thitsi* and bamboo must be tried, for it is the industry and the livelihood of the craftsman which is at stake. Some of the cheaper wares may thus be diverted, but *thitsi* will retain a place in the industry for the higher class wares.

A production and sale society gets nearer the ideal of co-operation than a mere credit society. It may be necessary to risk some funds to allow of purchase from the craftsman of a supply of the new wares which have been established as having a marketable value. To that extent the Superintendent of Cottage Industries must be responsible for backing his fancy with Government funds. Once an article finds a ready sale official action can fade out; it is not necessary to antagonize the normal methods of sale, official efforts should only be directed to opening up new channels or acting as escapes when the natural channels tend to silt up and obstruct flow.

Cottage industries have a survival value: directly as a means of providing subsidiary industries for part-time workers in need of part-time remuneration, and indirectly as a source of craftsmen for more organized industries. But if an industry is to survive it must justify its existence by providing an adequate remuneration to the worker, and it must also justify its existence by being of service to the community.

The survival of skilled craftsmanship is a subject about which people are inclined to be pessimistic, but personally I cannot feel that the evidence supports the theory that the proportion of master-craftsmen in relation to the whole population is any less to-day than it ever was. There may be a greater proportion of the population working on the outskirts of crafts and comparatively unskilled, but modern machinery does not destroy skill or discourage imagination. For from the most primitive times onwards, from the introduction of the first potter's wheel, the first simple loom, the first feather and bamboo blower for the bronze worker's furnace, the first flint artifact for scraping a pelt, the master-craftsman has been inventing and improving machines and tools to lighten his physical effort and perfect his out-turn, and he never can and never will, so long as he progresses, cease at his best to be an artist and a dreamer of dreams that come true. But that is another story.

A MEMBER: What is *thitsi*?

Mr. MORRIS: *Thitsi* is the juice obtained from a tree (*Melanorrhœa usitatissima*). An incision is made in the bark, very similar to the incision made in the bark of a rubber tree, and the juice is collected. It is an ugly, grey, evil-smelling juice, but as it dries it turns a beautiful jet black and gives a wonderful surface.

A MEMBER: What is the foundation they use in Burma to their lacquer-work?

Mr. MORRIS: The foundation work in all cases shown here was basket-work. There are different ways of making basket-work. You can weave your basket or wind it, according to the type of article. The first coats of *thitsi* help to strengthen the basket-work and prevent unravelling.

A MEMBER: It is all basket-work foundation? Nothing else?

Mr. MORRIS: The earlier work was, until they began to use wood-work, as described in the paper.

A MEMBER: There is no papier mâché?

Mr. MORRIS: No; that is one of the things that has been introduced recently, and it may be a useful development.

A MEMBER: How do they get the pale colours if it is black to start with?

Mr. MORRIS: By mixing with pigments. I have not anything here in painted designs; these are all sgraffito designs. The surface is scratched, the pigment is mixed with a little *thitsi*, and rubbed in and polished over. This red surface is a mixture of material which is the dragon's blood of the Chinese. It is mixed with *thitsi* and painted on as a paint. It is such a strong colour that it will even go over the black of the lacquer. They are mostly natural mineral pigments, but indigo is used for blue.

A MEMBER: Will not the keeping alive of the cottage industries depend on export, and how are people to get to know about them? Very few people really ever come across these things except at bazaars.

Mr. MORRIS: I agree that there is room for export, but generally speaking the export is for these fancy wares, and the fancy wares will not keep a body of workers going; you want the other as well. That is my contention.

We tried to interest home producers. Of course, there are practical difficulties, difficulties of the gap between an order and the time when it is filled when you are dealing with village workers. This is one of the very great difficulties. It is a gap which, as I suggested, could only be bridged by the Superintendent of Cottage Industries accepting an order and backing his fancy with Government funds. He would have to be a good salesman and know whether the goods were marketable.

A MEMBER: With regard to what the Chairman said about the Burman expressing himself in his particular style, I suppose the Anglo-Saxons used to express themselves by painting themselves with woad.

Yet we came to wear clothes, and I suppose are civilized and the better for that.

Mr. MORRIS: I have never known a craftsman who could not express himself, and express himself very forcibly. I think that the master craftsman had plenty of room for expressing himself in these wares, but the bulk of the wares were utilitarian things and there was no question that the bulk of the ware was wanted for use. When the master craftsman comes into the field he produces something beautiful.

A MEMBER: I think also that Burmese lacquer-work will stand a hot pot being put on it. In that it has a distinct advantage over the Japanese lacquer-work. I bought several things at a training school. They declared that they would stand heat and that they had a Japanese who had taught the process to the men. But I found that the dumb waiters and trays, if you put a teapot on them or hot-water jug, after the first two or three times were marked. I imagine that must have been inferior workmanship.

If any of you visit the British Industries Fair you will see sometimes there a very fine display indeed of village industries from India, but to what extent that really is a commercial success I do not know.

Mr. MORRIS: The point you raise about the lacquer-work is exceedingly interesting. The fact is that the lacquer-work can be finished with a final coat of material which is a wood oil of sorts and which gives you a polished finish, but that finish will not stand a hot plate.

On the other hand, in my own house, the dining-room furniture—which was built under my direction—is finished as lacquer-ware without a final application of wood oil, and you can put a hot plate on that. The best Japanese work, too, will not mark, but if they finish it with the cheap material I can understand it. *Thitsi* will stand alkali and acid, and it is the only anti-corrosive paint I know.

A MEMBER: How would prices compare with the other lacquer-work?

Mr. MORRIS: It all depends. I have always pressed people who want to send it home to get simple and plain lacquer-ware, which is comparatively cheap. But they will send home more ornate work, which is more expensive in the country of origin and too expensive to find a ready market at home.

Sir JAMES MCKENNA: What about the work made with a horse-hair basis?

Mr. MORRIS: That is a very interesting product. *Thitsi* is a

wonderfully flexible material. They put it on to a framework with basket-work, not made of bamboo but of very thin slivers of bamboo and with horsehair as the weave. The great attraction is that if you get that you can squeeze the two sides together and it will not crack. It is indeed a wonderfully flexible material, but I always like people to try that on their own pieces and not on mine, because naturally you can go too far.

Sir JAMES MCKENNA: That is the luxury lacquer, is it not?

Mr. MORRIS: Yes, it is very expensive. A piece of lacquer like that has had to have twenty or thirty coats and has taken six or eight months to make.

A MEMBER: It is copied from Fu-Chow.

Mr. MORRIS: I would hesitate to say that, because it goes back into the dim past; but possibly it has the same origin.

The CHAIRMAN: It is not very often that we are able to listen to a paper which combines philosophy with economics and is also tinged with humour.

What struck me about Mr. Morris's way of approaching the subject was that he was dealing with an economic question, but he does not content himself with merely examining whether such-and-such an article can be put on the market, but tries to go deeper and to discover what is in the minds of the people who are producing it and under what conditions it can appeal to the people themselves who make it as well as to the consumer who buys it. I think those two points of view are not very often examined at the same time.

I found this address particularly interesting because I, too, for many years had the difficult task of trying to organize, with much less technical knowledge than Mr. Morris, a number of co-operative societies of small craftsmen, and was faced with exactly the same problems. He speaks of the difficulties of competition with machine-made goods, the reluctance of the people themselves to use the old-fashioned things because they are no longer fashionable, and the very great difficulty in finding a new market overseas by export.

I would have suggested from my own experience—and, as Mr. Morris has pointed out, the experience of every person and every art is different—I would have suggested that he perhaps underrates the possibilities of an export market, provided you are not proposing to establish a vast world industry. When you speak of an industry and whether you can find an outlet for its products, the question is, how large is the industry? If it is a small one, an export market can

possibly be made, as has been done in British Malaya with some of the sarongs and silk products there or with Kashmiri goods and certain of the craft products of Africa.

On the other hand, there remains this difficulty also that unless the people can switch over their production for home consumption to the things that their neighbours now want, can make baths or basins or whatever it may be instead of the old-fashioned water-pots, it is improbable that they can live on the export market alone. Also the exported product tends to become standardized, or sometimes fantastic. That may be seen at Jaipur with regard to the native brass-work, and at Benin in West Africa, where the same model of brass mask is made which was probably given to them by the Portuguese three hundred years ago, and it does not vary. It has a limited fancy market, but the bulk of the local people do not want it.

What is needed is that the Government should try to persuade the people who are producing handicraft goods to make what is now the new fashion of the people around them.

I remember another place in Africa where rather heavy wooden goods were made. For reasons good or bad the missionaries considered that these things were identified with unchristian cults, and they will not and the Government will not support the industry; and yet those same goods could be taken and applied to non-pagan purposes. For instance, I saw a little Christian church built just beside these wood-workers, and the panels had been brought out from home, whilst there was first-class work just beside them. That is the sort of thing that seems to me to be absurd.

I confess I am a little open to Mr. Morris's attack of being a sentimentalist in the matter; but it is not only sentimentality. I do feel that by their crafts a people express themselves. There is something real in their crafts and something worth keeping. I think they lose something if they substitute for them the use of imported bicycles and gramophones. Those of us who have that sentiment should continue the struggle to divert the activities of the craftsmen to new uses which may be serviceable to the people around them. (Applause.)

Sir JAMES MCKENNA: May I second the vote of thanks to Mr. Morris for his extremely interesting talk. I do so with strong personal reasons, because very many years ago I was the Provincial Art Officer in Burma. The Provincial Art Officer's work and duties were, in my case, in addition to a very large number of other appointments. When, after my return to Burma from India, I was administrative head of arts

and crafts again, I was extremely glad to find that the services of my old friend, Mr. Morris, were available, and that he was Provincial Art Officer.

Mr. Morris had a distinguished career in Burma, first as irrigation engineer and then as head of the Insein Technical Institute.

In addition to that he carried out the development of the arts and crafts of Burma on a thoroughly sound basis.

With reference to the struggle between art and utility, I think we are in rather a vicious circle. With all deference to Mrs. Morris's washhand basin, out of which the young Morrises seem to have got a good deal of fun, I am sure the ordinary Burmese lady would much prefer an enamel basin, first because it would be less likely to crack, and secondly it would be cheaper. You are always up against the competition of European imports equal in quality and cheaper in price.

Commercialization, of course, is the enemy of fine art. The Burman does not want these artistic things; he wants utility. The range of European buyers cannot support the æsthetic.

I have very much pleasure in seconding a very hearty vote of thanks to Mr. Morris, and I am very glad to meet him again. (Applause.)

Mr. MORRIS: I thank you very much, ladies and gentlemen. It is very difficult to deal with this subject in the time available; I could only deal with certain aspects.

Specimens of Burmese lacquer were shown by the Lecturer to illustrate his points.