JOURNAL OF THE ROYAL SOCIETY OF ARTS

11TH MARCH 1949

object which would be beautiful to look at, suitable for its purpose, and, at the same time, practical to make.

EXHIBITION

An Exhibition of winning and commended designs is to be held at the Society's House from 21 March–2 April, and will be open to the public from 10 a.m.–5.30 p.m. on Mondays to Fridays, and 10 a.m.–12.30 p.m. on Saturdays. It is hoped that Fellows will be able to find an opportunity of visiting this Exhibition, but the Board would like to stress that the real benefits of the Bursaries are revealed in the progress made and experience gained by winning candidates during their visits abroad, rather than in the entries submitted, by which the full value of these Competitions can hardly be judged. As an example of this, the Jury of the Domestic Solid-Fuel-Burning Appliances Section were able to report that Mr. R. T. J. Homes, the winning candidate in this Section, who had also been awarded a Bursary in the 1947 Competition, had made a great deal of progress during the year, and clearly benefited from his visit to Sweden last summer.

Copies of the full Report, which contains details of the subjects set, the number of entries, the names of the commended candidates and the comments and composition of the Juries, may be obtained on application to the Secretary.

1949 COMPETITION

A further announcement will be made shortly of the details of the Bursaries to be offered in the 1949 Competition.

WILLIAM SHIPLEY AND THE ROYAL SOCIETY OF ARTS:

THE HISTORY OF AN IDEA

A lecture delivered on Monday, 17th January, 1949

By K. W. Luckhurst, M.A., Secretary of the Society

"Founded in 1754." Behind the prosaic phrase which appears so regularly on the Journal of the Royal Society of Arts lies a romantic and generally unsuspected story. Our founder, William Shipley, was no influential figure in London society who could quickly and easily gather round him a group of kindred spirits. He was an obscure drawing master living in a distant provincial town and with only the slightest footing in London who, nevertheless, succeeded in establishing there a Society which within five years became one of the leading institutions of the country. And, having done this, he retired gracefully and returned to his teaching of drawing.

Shipley's achievement was not attained by the force of personal ambition.

262
He showed, it is true, a quiet persistence and determination, but these were prompted by a deep and genuine patriotism without the least desire for personal aggrandisement. When his fellow-members paid their tribute to him by awarding him one of the first of the Society's gold medals, the inscription they determined upon was "To William Shipley, whose public spirit gave rise to this Society", and most appropriately a similar description still appears beneath his portrait, by his pupil Cosway, in the entrance hall of the Society's House.
THE BIRTH OF AN IDEA

The success of Shipley's project, however, is due ultimately not so much to the force of his character as to the rightness of the idea, simple, indeed naive, though it was, which he conceived and on which he based his Society. It is fortunate, therefore, that we possess, in a pamphlet dated 1763 and entitled "A Concise Account of the Rise, Progress and Present State of the Society for the Encouragement of Arts, Manufactures and Commerce", a detailed story of how the project gradually formed in his mind.

It really grew from two ideas, the first of which came to him as he watched the horse fair which was held twice a year at Northampton, where he resided. When he saw all the buying and selling that went on at the fair, involving large sums of money, he began to enquire into the cause of its success. He was told that it was largely due to the institution of horse-racing meetings; and that many of these had recently been promoted by the King and others who had presented plates or prizes for the various races. From this it occurred to Shipley that the gift of a comparatively few prizes had thus stimulated a whole industry; and impressed by this discovery he began to ask himself whether this same principle could not be applied to stimulate other industries. He decided that it could, and subsequent history proved that he was right, but in the meantime there remained a second question—where was the money for even a few modest prizes to come from? Until Shipley could find the answer to that, the first idea had to be shelved.

His second idea—the solution to this problem—came to him, like the first, from a local circumstance. Shipley was shocked at the high prices which the poor people of Northampton had to pay for their winter fuel, and as he pondered the matter he realised how this came about. Every summer the merchants of the town used to buy in large stocks of fuel at low prices which they kept until the winter and then sold at high prices. Shipley probably had no general quarrel with the common principle of buying in the cheapest market and selling in the dearest. But he was concerned about the hardship suffered by the poor. He decided therefore to try to raise a fund from public-spirited individuals which would enable him, like the merchants, to buy stocks of fuel at summer prices and then, unlike them, sell them to poor people without profit in the winter. The plan succeeded, and in 1751 and 1752, thanks to him and the charitable people who supported him, the poor people of Northampton bought their fuel in the winter at summer prices.

And then suddenly the two ideas came together in his mind, and Shipley saw that the way to finance his scheme for stimulating industry by means of prizes was to raise a fund from public-spirited people in the same way as he had raised a fund for his coal scheme. Convinced that he had now arrived at a workable plan, and determined to put it into practice on nothing less than a national scale, he set out for London, realising that only there could he find a sufficient number of influential people to support him.

Shipley already had three friends in London—none of them men of great eminence—but he had been given an introduction to a Rev. Dr. Stephen Hales, F.R.S., a distinguished scientist, and he lost no time in calling upon him. Fortunately, Hales welcomed Shipley's proposals and promised to mention them to various
influential friends, including Viscount Folkestone and Lord Romney, who subsequently became respectively the first and second Presidents of the Society. In the meantime, however, he asked Shipley to put his ideas down in writing and get them printed, so that he would have something definite to put before those whom he should endeavour to interest in the scheme. Shipley accordingly prepared two leaflets, one of them entitled “Proposals for raising by subscription a fund to be distributed in Premiums for the promoting of improvements in the liberal arts and sciences, manufactures, etc.”, and the other “A scheme for putting the Proposals in execution”. In the former his general ideas are set forth, in the latter a definite scheme for a society, and rules for the conduct of the proposed competitions are laid down, worked out in remarkable and very practical detail.

When the ground had been prepared for him by the private circulation of his pamphlets, Shipley returned to London, this time to reside. He now paid a successful visit to Lord Romney, who promised his own support and to obtain that of Viscount Folkestone. Shipley then settled down to three months of hard canvassing. The results were not encouraging. Only fifteen people promised to join the scheme, but, nothing daunted, Shipley felt that the time had come to call a meeting, and eleven of these fifteen, including Lord Romney, Lord Folkestone and Dr. Hales, came together at Rawthmell’s Coffee House, Henrietta Street, on 22nd March, 1754, at what is generally regarded as the first meeting of the Society of Arts.

The story thus far has been told in some detail, not merely for its intrinsic human interest but because of the light which it throws on the basis of this unique as well as ancient Society, which is the converse of that of almost all other societies. Whereas others are founded to promote some definite object, and occupy themselves in finding the best means to promote that object, the Society of Arts was founded on a means and has occupied itself since in discovering the best objects to which to apply the means. Hence, the importance of grasping the two ideas—or “plan” as they were so often jointly termed—which sent our founder on his way from Northampton to London: first, the use of premiums as a means of encouragement; second, the raising of a public fund to provide these premiums. As we shall see later, the idea of premiums quickly gave birth to other ideas for the employment of the fund, but it is upon these various practical conceptions, and not upon their particular applications, that the long history of the Society hangs together.

The History of the Society as a Society

Before, however, we consider the directions in which these ideas actually led in practice it will be as well to survey briefly the history of the Society as a Society.

For the first year of its life there was but little growth, but from early 1755 onwards a rapid expansion of membership took place. Within a few years it reached a size of about 3,000, and thereafter, until its recent increase, it ranged between 2,500 and 3,500. If a list were prepared of all the famous people who have in the course of its long history been members of this Society, it could surely not be equalled by any similar body. There will always, however, be a particular glamour attaching to the roll of our early members, which includes names such as Samuel Johnson and James Boswell, Sir Joshua Reynolds, Oliver Goldsmith, David Garrick, Edward Gibbon, William Hogarth, William Pitt, Samuel Richardson, Laurence Sterne, Benjamin
Franklin, Thomas Chippendale and Sir Joseph Banks, to mention but a few. Almost all the notabilities of a brilliant age are in the list.

There has never been any very precise qualification for membership. The first public announcement of the formation of the Society, issued in 1754, says: “Some of the nobility, clergy, gentlemen and merchants, having at heart the good of this country, have lately met together in order to form themselves into a Society for the encouragement of Arts, Manufactures and Commerce”, and Shipley, in his “Scheme”, in giving a reason for the proposed admission of ladies as well as men, says: “There is no reason to imagine that they will be behindhand in a generous and sincere regard for the good of their country”. It is clear that a certain degree of social status was expected, but more still a generous desire to serve the community. In accordance with Shipley’s proposal, ladies did in fact become members at a very early date, but it was not until 1941, and the election of Dame Caroline Haslett as a Member of Council, that any lady held office in the Society. That was followed only six years later, however, by the appointment of a lady, in the person of The Princess Elizabeth, to the Society’s highest office.

The Princess is the sixth member of the Royal House to be President. Except for a few short intervals the Society has enjoyed this honour for the last 130 years, although it is only since 1908 that it has itself been entitled to the affix “Royal”. The late Duke of Connaught was President for 31 years and the annual occasions when he presented the Society’s Albert Medal will never be forgotten by those who were privileged to attend them. As the Duke, with obvious delight and pride, handed to the recipient the medal, “instituted”, as he used to say, “in memory of my beloved father”, history came alive, for a century, all but three years, elapsed between the beginning of Prince Albert’s Presidency and the last occasion on which his son presented the medal which commemorated it.

The Sovereign has been Patron since 1901, when Edward VII, who as Prince of Wales had been President for 38 years, ascended the Throne; and our present King, as Duke of York, became a Life Fellow in 1933 and subsequently was elected a Vice-Patron, becoming Patron in 1936.

The homes of the Society, and in particular, the beautiful house which it now occupies in the Adelphi, are an interesting story in themselves, too long to be embarked upon now. For the first twenty years a number of different premises were used, all in the region of Charing Cross, until in 1774 the present house was built by the Adam brothers for the Society, which has occupied it ever since, first as tenant and, since 1922, as owner. Its purchase in that year, with the aid of generous public subscriptions, averted the threat of modern “development” of the site, and is one of the major events in the Society’s history during the present century.

The most remarkable period in the Society’s history is undoubtedly the 1840’s. At the beginning of that decade the Society was on the verge of bankruptcy and within an ace of being closed down; at the end it accomplished its greatest achievement—the inauguration of the Great Exhibition of 1851; and in between it had entirely reconstituted itself and received its Royal Charter.

One development of that period had particularly important effects upon the whole future course of the Society’s history. This was the decision taken in 1845 to delegate to an elected Council the full responsibility for the conduct of the Society’s affairs...
and activities which hitherto had rested entirely with the whole Society at its weekly meetings. Only the increase in administrative efficiency which was brought about by this change could have enabled the Society to cope with the multitude of important tasks which it undertook in the next few decades and which soon brought about a full recovery of its prestige and finances. But it was also a highly fortunate conjunction of events which brought to the Society at this critical time a President such as Prince Albert, members of such energy and wisdom as Henry Cole, and a Secretary such as Scott Russell. Not only did they negotiate these controversial and radical changes, but in their hands the new administrative machine was employed upon work of the utmost public importance.

It may also be realised, when the first half of the present century can be seen in
proper perspective, that a second and comparable renaissance took place in the Society in the period following the First World War. During the last quarter of a century there has been a remarkable expansion both of membership and activity, and although the changes have been slower than they were a century ago, they may be judged in due time to have been as real. But these are early days yet to speak in such terms.

One further matter which cannot be omitted from any general consideration of the Society is the respected place which it holds in the centre of a wide circle of "kindred societies". Of some of these it is virtually the direct parent. One important and highly select society, the Faculty of Royal Designers for Industry, was actually brought into existence by an Ordinance of the Council. With some other societies the link is less official but none the less real, the move to found them having originated with a group of people, most of whom were first brought together as members of the Society of Arts. This was the case with the Chemical Society, the Royal Photographic Society, the Society of Chemical Industry and the Royal Institute of Chemistry. Of other societies, again, it has been the god-parent, particularly by means of the important Union of Institutions which it organised and presided over last century; for others it has provided a meeting-place, either until they acquired premises of their own, or more permanently. By a happy tradition the Journal of the Royal Society of Arts still demonstrates this special position of the Society as "a mother of societies" by publishing regularly a list of "Some Meetings of Other Societies", which is surely a unique feature in a periodical of this character.

The Premium Method

Consideration of what the Royal Society of Arts has done for other societies brings us naturally into the second part of our subject, namely, the work of the Society.

At the very first meeting of the Society a definite practical start was made. Specific proposals were put forward for the offer of premiums, and at a second meeting a week later it was decided to adopt these and have them printed and published. The offers were as follows:

(1) For the best quantity of cobalt (not less than 20 lb.) produced in this country—£30.
(2) For raising and curing not less than 20 lb. of madder—£30.
(3) For the best drawing by a child under 14 years of age—£15.
(4) For the best drawing by a child between 14 and 17—£15.

The list was short and hastily compiled, but the offers had definite industrial purposes which we know to have been: to stimulate the home production of two raw materials (cobalt and madder) which until then had to be imported at heavy cost; by making available cheap dyestuffs, to enable the British textile industry to discontinue sending textiles abroad to be dyed; and to foster a supply of draughtsmen to industry (especially the textile industry) for the preparation of designs.

An interesting discovery has recently been made in connection with this first
premium list of the Society. Both the drawing prizes offered in 1754 were divided among several children, and a short time ago a pencil drawing by John Smart, the famous miniaturist, which was awarded the second prize of £4 for the under-14 class, was found in one of the Society's cellars—surely one of the most interesting records we possess.

Pencil drawing by John Smart at the age of 10 or 11, entered by him for the Society's first competition (1754) and awarded a prize of £4.

The first premium list was merely a trial effort, and soon a very definite technique was developed for the whole business of the prize competitions. With so many able and distinguished people applying themselves to the matter it is not surprising that the job was done with great thoroughness and far-sightedness. The following considerations had to be investigated with regard to each individual offer: (1) whether the object for which the prize was proposed was an important one with more than temporary or local significance; (2) the precise requirements to be stipulated as the basis of competition; (3) whether the prize should consist of money or a medal (this mainly depended on whether the offer was intended to appeal to aristocrats or ordinary folk); (4) how many prizes should be offered for the particular purpose, and what should be their amount; (5) how long a period should be allowed to competitors; (6) the most appropriate means of certification; (7) whether competitors needed to be given any preliminary information on the subject of the offer (for example, when the offer was for the cultivation of a new crop, candidates were told where they could purchase the seed); (8) whether any permanent record in the form of a written account, drawings or, in the case of machines, a model, should be required. Whenever circumstances required it, long research was undertaken into the potential usefulness of an award, before it was decided to offer it. Even at the first meeting in March 1754, a decision as to the proposed offers was deferred until Shipley could report, as he did at the next
meeting, what quantities of madder and cobalt were imported the year before into the United Kingdom, so that it might be clear whether it was important to encourage their home production.

As soon as the Society was fully constituted, all this detailed investigation was referred to one of the Committees, of which the six principal dealt respectively with Agriculture, Chemistry, Polite Arts (as they were termed), Manufactures, Mechanics, and Colonies and Trade. Although particular members were nominated to specific committees, attendance and participation in any committee meeting was open to any member of the Society. They were, so to speak, "Committees of the whole House". Reference of a matter to a committee was not a convenient way of shelving it for some time. Often a committee was ordered to meet on a specific evening within a week and report back to the Society at its next weekly meeting, and in consequence it not infrequently happened that there was a meeting of the Society, or of a committee, on every night of the week.

A TYPICAL EARLY MEETING

It may be helpful at this stage to eavesdrop, as it were, by means of the Minutes, at a typical Ordinary (or weekly) Meeting of the Society in the year 1763. It is the meeting on Wednesday, 26th January, and it began at 6 p.m. (There is no record of the time at which it closed but we do know that there was a rule that no new business should be introduced after 10 p.m. No wonder that when the Adam brothers dealt the Society's House they found space for a coffee room [now the Accountant's office] adjoining the meeting room!) The meeting took place at the Society's offices, which were then situated in the Strand on a site approximately opposite the present Woolworth's shop.

The Chair was taken by Charles Whitworth. First, the minutes of the last meeting were read straight through and the thirteen candidates for membership proposed at the last meeting were elected. After that, in accordance with custom, the minutes were read through again item by item. The new business then began.

First, the Secretary submitted the draft of a letter of thanks to an Italian Count who proposed to dedicate a book to the Society. The draft was approved and the letter ordered to be sent.

Next came a letter about madder, which was referred to the Committee of Mechanics, presumably because it dealt with some apparatus for treating the product.

Then the Secretary produced a letter in French from a candidate for the premium for casting in bronze, asking for an extension of the time limit because of an accident. His request was referred to the Committee of Polite Arts.

Then came a report from the Exhibition Committee. Various details were settled regarding the next exhibition of contemporary art, and the text of the public notice announcing it was approved.

After that came a financial statement from the Committee of Accounts, and this was followed by a report from the Committee of Chemistry dealing with claims for the premiums for dyeing cloth, for compositions for preserving ships' planks, and for dyeing cotton yarn. New premiums to be offered for a substitute for borax, zaffre and smalt (these two latter being preparations of cobalt) were also considered, and the various proposals of the committee were approved.

270
Then came the report of the Committee of Agriculture, proposing a premium for the culture of burnet as a food for cattle. This also was approved, but a recommendation by the Committee of British Colonies and Trade to renew the offer of a premium for cochineal was referred back to the committee.

It was then proposed and agreed to ask the Committee of Polite Arts to consider a premium for painting in enamel.

After this, in response to a letter from a British merchant at Leghorn, it was decided to ask the Committee of Agriculture to consider offering a premium for the planting and cultivation of vines and olives in Minorca (at that time a British possession) "to serve as nurseries for the British plantations" (in America). The committee were ordered to meet the following Monday to consider this.

Then a letter was read from the Consul-General at Algiers "offering his services to the Society in giving them information of anything they may want in his department". The Secretary was ordered to send him a letter of thanks.

By this time of the evening the Great Room evidently became rather chilly, for a member proposed that something should be done about the heating, and it was decided to order the Committee of Mechanics to look into the matter at their meeting the next evening and suggest how the stoves in the Great Room might be made to give out more warmth.

Then a letter was read concerning the preservation of pictures from the effects of damp and hot sunshine. This was referred to the Committee of Polite Arts.

As a sign that business was drawing to a close the Registrar now gave his weekly report on claims for premiums which had been received since the last meeting—three entries for prizes for various types of engravings. These also were referred to the Committee of Polite Arts.

Finally, six candidates were proposed for membership, and the meeting was "adjourned to Wednesday the 2nd February at 6 precisely". And so the members separated for a week—except for those who intended to be present at the Committee of Mechanics next evening, or the Committee of Polite Arts on Friday evening, or the Committee of Miscellaneous Affairs on Saturday evening, or the Committee of Agriculture on Monday evening, or the Committee of Miscellaneous Affairs (again) on Tuesday evening!

It must have been exhausting to be a member of the Society in those days! But it was only by businesslike methods and energetic procedure that so vast an amount of work could be carried through. And what fun to spend one's leisure time in the evenings exercising a practical influence on such a variety of manufactures and arts and stretching out a hand to all parts of the United Kingdom, to the North American Colonies and one never knew where next!

The Premium List for 1764

Have there ever been such prize competitions as our early members organised in this way? The size and scope of them is almost unbelievable. Let us take, for instance, the offers published in 1764, as they include some that we have just seen being considered early in 1763. They occupy 91 pages of text and comprise 380 classes in which to compete.

In the agriculture section there are 92 classes, covering the planting of
several species of trees, the growing of a number of different experimental feeding stuffs for cattle and sheep (including burnet), the collection of quantities of pure grass seed of named varieties, reports on the most profitable method of cultivating numerous crops, the production of specified quantities of madder and hemp, the manufacture of compost, the keeping of bees, and the invention of new types of agricultural implements.

In the chemistry section there are offers of 23 premiums covering the production of various minerals (including a substitute for borax, small and zaffre), varnishes, enamels, pigments and dyes.

Under the heading of Polite Arts there are some fifty separate awards for different kinds of drawing, divided according to the type of subject and the age and sex of the candidate. Particularly noteworthy are the classes for "the best compositions of drawings or ornaments, being original designs fit for embroiderers, calico printers, paper stainers or any other art or manufacture". There are another fifty classes for medals and medallions, clay and wax models, etchings and engravings, cameos, paintings in enamel, and statuary in bronze and marble. Architecture is also represented, and a sum is offered for making an accurate survey of any county to the scale of one inch to a mile.

There are 30 classes under the heading of manufactures, most of them for textiles. They include an interesting proposal to encourage experiments with fibres of three different types which had been discovered in the plantain, and, among more orthodox fabrics, the making of silk, cotton, linen or woollen quilting in the loom, and the spinning of various types of yarn. There are also prizes for technical improvements for spinning wheels and stocking frames.

In mechanics there are only five classes, a machine for grinding and polishing glass, a mill for grinding madder and a pump for ships.

Next, to encourage the development of the American and West Indian Colonies prizes are offered in 123 classes for the production there of raisins, wines, iron, potash, pearl ash, silk, saltpetre, cobalt, log wood, hemp, dried sturgeons, cochineal, and such drugs and spices as opium, barilla, cinnamon, aloes and sarsaparilla; and the section concludes with an offer to assist with premiums the work of the botanical gardens which were being instituted in the West Indies.

Finally, there is a special short list of prizes to encourage fishing for turbot and cod in British waters.

Judging the Claims

Such was the extent of the premium list for a single year. But the Society's work did not finish with the issue of the list. The entries, or "claims", which resulted, were the subject of as close a scrutiny as the lists themselves. The greatest care was taken to ensure impartiality of judgment, particularly in the art competitions, and no effort or expense was spared to test thoroughly any new invention or discovery for which a claim was made. An interesting example of the latter is afforded in the case of the respirator invented by a miner called John Roberts in the year 1825. The purpose of the mask, which, although the first known respirator, was based on the same principles as a modern gas mask, was to enable people to breathe in thick smoke, or "in air loaded with suffocating vapours". John Roberts submitted to the
The Annual Presentation of Prizes in the Society's "Great Room", in 1804 (from an old print)

following test, which took place at the Mechanics Institution, Southampton Buildings, and was witnessed by the Secretary and several members of the Society.

In a chamber constructed of boards about fifteen feet high, moist wood shavings, wet hay, two pounds of brimstone and a shovelful of rosin were set fire to and the door was shut. In a few minutes the chamber seemed full of smoke, so that some firemen, who had entered the chamber, were only enabled to remain there "by crouching on their bellies". More fuel was now put on the fire, and Roberts, with his apparatus on, entered the room, walking erect. The following details are quoted from the Transactions:

"The temperature of the room was at this time 68° Fahr., that of the external air being 48°. In ten minutes the temperature had risen to 87° in the upper part of the chamber. At 19 minutes the candle on the window-board, which had been burning very dim, went out; at 20 minutes the temperature was 91°, at 22 minutes it was 104°, at 30 minutes the candle fell down in a melting state, the temperature being 115°. At 36 minutes Roberts came out of the chamber, having been for the last quarter of an hour on a ladder in the upper part of the chamber, and quite invisible from the density of the smoke. When he came out he was, as might be expected, very hot, and his pulse was 174, but he did not appear exhausted: he took some coffee, and in about half an hour his pulse had subsided to its ordinary state. He thus afforded to every spectator a satisfactory demonstration of the efficacy of his invention".

After submitting to this ordeal Roberts received his due reward—a silver medal and 50 guineas.

It is clear, therefore, that our early predecessors expended immense pains as well as large sums of money over these truly remarkable prize competitions. What did they achieve by them? Lists are, of course, preserved of all the awards which were actually made, which represent only a proportion—but a substantial proportion—
of those which were offered. Up to the year 1766 no less than £16,625 (a large amount for those days) had been expended in premiums. But what matters is the extent of their influence beyond the actual winners of prizes. A few claims can be put forward with confidence: (1) they resulted in the reforestation of very considerable areas of land; (2) they played a predominant part in the earlier stages of the "agricultural revolution", and were the means of introducing several new crops to this country and to the colonies and of the invention of new agricultural implements; (3) they effectively fostered the skill of draughtsmanship; (4) they stimulated the invention of many mechanical devices and materially contributed to the progress of the Industrial Revolution.

Awards in the Nineteenth and Twentieth Centuries
For ninety years the prize competitions continued to be the main function of the Society, but as a result of the great changes within the Society during the 1840's they began rapidly to lose their predominance in favour of other activities. Awards, however, continued to be made from time to time, and since the First World War there has been a considerable revival of this old method of encouragement. In the Competition of Industrial Designs, which was held annually from 1924 to 1933, over £11,000 was awarded in prize money, and undoubtedly this series, by the publicity which it gained, and in other ways, contributed a great deal to the revival of interest in industrial design which has taken place in the last quarter of a century. In the past few years a scholarship competition has been held in place of the earlier type of competition, the intention being, by granting greater awards to fewer candidates, to concentrate the effects of the competition in a few potential designers of particular promise. Up to the present a further £3,500 has been awarded by way of these bursaries. Another recent revival of the competition method in the Society has been in connection with the Thomas Gray Memorial Trust, the income of which is chiefly expended in prizes for navigational inventions and for boys training for the sea.

There are three important awards in the Society's gift which are not so much "prizes" as "tributes". These are the Albert Medal, the Swiney Prize for Jurisprudence and the R. B. Bennett Empire Prize. The R.D.I. Distinction, which in one sense is a "tribute", as it is only conferred on eminent designers, is also, like the old awards, made for purposes of "encouragement", for the intention is that it shall foster industrial design and enhance the status of designers generally.

It is clear that Shipley's original method is even yet not altogether outmoded, and we may look forward to many an interesting and useful award still to come.

Exhibitions
Early in the lecture it was mentioned that the premium method quickly gave rise to other methods of employing the Society's funds and "encouraging arts, manufactures and commerce". The first of these was exhibitions.

It is the Society's proud boast that it not only originated many species of exhibition: it also originated the whole genus. The first modern exhibition of any kind took place in the year 1760, when an exhibition of the works of members of the Society of Artists was held in the rooms of the Society of Arts. It came about in this way.
The successful entries for the Society's awards were exhibited informally in the Society's premises and created very great interest. Some artists, noticing what large numbers of people went to see the drawings sent in for the competitions, had the idea that people might go to see their own works, and approached the Society of Arts for its help in arranging an exhibition of their paintings. The Society agreed to lend its Great Room, and to organise the whole thing if the Society of Artists would produce the exhibits. The exhibition was accordingly held, and was so great a success that it was repeated for a number of years. (It will be remembered that at the meeting described above arrangements were being made for the 1764 Exhibition.) Moreover, it led, within eight years, to the founding of the Royal Academy. The idea of establishing a Royal Academy of Arts had long been mooted, but no solution had been found to the problem of how to finance it. Here, however, was seen to be the answer. An annual exhibition of the work of artists was evidently a paying concern and was an appropriate as well as adequate means for the maintenance of such an institution.

A very different kind of exhibition originated by the Society is the Industrial Exhibition. Like the first exhibition of paintings, it arose from the Society's offers of prizes. It soon became apparent that if useful new implements and machines were invented as a result of the Society's scheme, other people must be given an opportunity to see them so that their use might be encouraged. It therefore became the practice to ask prizewinners to provide models (for which the Society paid) and these were collected in a room known as the Repository. It was, of course, more of a museum than an exhibition, as it was permanently open, but it was in essence the first Industrial Exhibition.

A most interesting and excellently illustrated description of many of the famous inventions included in this "Repository" was published by William Bailey, Registrar of the Society, in 1772. This work, which appeals to the most casual reader by the beauty of its engravings, is also of the greatest importance to the historian as a record of the early stages in the Industrial Revolution, and both the book and the collection which it describes, made a most significant contribution to the progress of mechanical development.

Machine for grinding and polishing glass. From the engraving in Bailey's Catalogue of the Society's Repository. The collar beam (b) for the "circumambulating horse" is to the right of the central pivot (c). In the left foreground is the apparatus for grinding, on the right is that for polishing.
Another member of the Society’s staff, a porter named George Cockings, has also described some of these machines, in a “poem” entitled “Arts, Manufactures and Commerce” which he wrote to celebrate his appointment to the Society. Let him recount for us the wonders of one of these inventions, a machine for grinding and polishing glass:

“On Principles of Skill (well understood)
With plain intelligible Aptitude,
To polish Glass, a new Machine comes forth,
(Whose future Trials may proclaim its Worth;)
'Tis work’d by windy Pow’r, or watry Force,
Or by a circumambulating Horse:
Two diff’rent Ways the Crank, the Runner guides,
As o’er a subject Plate it gently glides;
By other Cranks, some Polishers are made
At first t’advance, and then turn retrograde;
And as they o’er the Spheres, and Basons pass,
Polish the convex, and the concave Glass.”

Although George Cockings may cause us to laugh at this quaint and cumbrous old piece of machinery (or is it mainly at his quaint and cumbrous verse?), we must not forget that at least one machine of this design was actually made and put into operation in London, and that it came into existence because the Society, having learned that the process of polishing glass had been mechanised on the Continent, with great economic benefit, had taken deliberate steps, by repeated offers of a premium, to encourage a similar development in this country. (We found it, for example, in the list for 1764.) In doing so they added another small quantity of momentum to the whole mechanising movement of industry.

The origination of a third type of exhibition—the international exhibition—is probably the most celebrated single achievement of the Society. It is important to note that the Society did not originate the idea of international exhibitions; the French did that in the late 1830’s. But it did originate the first one ever actually held—the Great Exhibition of 1851. Let the story of how it came about be told from a contemporary record, in the form of extracts from an account prepared by Scott Russell, the then Secretary of the Society, by command of Prince Albert:

“The earliest suggestion of forming in England great Periodical Exhibitions of the Products of Industry, in connection with the Society for Encouragement of Arts and Manufactures, was made by His Royal Highness Prince Albert, the President, to some of the members of the Society, in 1845.

“The English people were then very imperfectly acquainted with the value of such Exhibitions—their influence on the character as well as the commerce of the nation. They required to be educated for this object, and education had to be provided. Premiums for Works of Industrial Art and Exhibitions on a comparatively small scale, were accordingly instituted for this purpose. The progress, however, of public information and opinion was slow. So little had taste and talent then taken this direction, that in 1846 hardly any competitors came forward, and it was with difficulty the judges could find subjects worthy of reward.

“Before the Distribution of Premiums in June, 1846, His Royal Highness Prince Albert strongly urged on a Deputation who waited on him the necessity of further exertions in this direction; observing that the Manufactures of England, excelling in solidity and excellence, were outdone in beauty of design by those of other Countries.
His Royal Highness indicated the subjects for which encouragements should be held out. Accordingly a new and enlarged series of Prizes were issued, and preparations made for an enlarged competition and exhibition in 1847.

"This Exhibition—the first of any magnitude—took place in the House of the Society, in March, 1847. The result was triumphant. Twenty thousand people visited the Exhibition. The lesson was given. The Manufacturers found that 20,000 customers had seen their wares, and had learned to select good from bad."

(Then follows a brief account of the even more successful exhibitions of 1848 and 1849.)

"It was obvious", continues Scott Russell, "during the progress of these Exhibitions, that the public mind was gradually becoming better informed on the nature and effects of great Public Exhibitions of Industrial Art; and at the end of the Session, in June, 1849, everything seemed ripe for carrying into effect the plan of His Royal Highness for a great National Exhibition.

"It was in June, 1849, that Mr. Scott Russell ventured first to submit to His Royal Highness Prince Albert, and then to state publicly at the Annual Distribution of Prizes, that the time seemed to have arrived when it was possible to carry the original suggestion of His Royal Highness into effect, with good grounds for the expectation of success.

"Soon after this, His Royal Highness Prince Albert commanded the attendance of Mr. Scott Russell at Buckingham Palace, on the subject of the proposed Periodical Exhibition. The Prince desired him to state at length his reasons for having said that the wishes of His Royal Highness had now a fair chance of being successfully carried out.

"On the 30th of June, 1849, Mr. Cole and Mr. Fuller, with Mr. Scott Russell, attended by His Royal Highness's command at Buckingham Palace, when Mr. Thomas Cubitt was summoned to meet them. It was at this Meeting that His Royal Highness communicated his views fully regarding the formation of a Great Collection of Works of Industry and Art in London in 1851, for the purposes of Exhibition, and of competition and encouragement".

278
The minutes of this historic conference are happily in the possession of the Society, and they include the following all-important paragraph drafted in the Prince's own hand:

"It was a question whether this Exhibition should be exclusively limited to British Industry. It was considered that, whilst it appears an error to fix any limitation to the productions of Machinery, Science and Taste, which are of no country, but belong, as a whole, to the civilised world, particular advantage to British Industry might be derived from placing it in fair competition with that of other Nations."

Thus was this great exhibition born—within this Society. Its subsequent organisation was placed (as the result of the Society's representations through the Prince Consort) in the hands of a Royal Commission, but as it contributed the President of the Commission, one of the two Joint Secretaries, and several other office-bearers, its influence, though not its official responsibility, remained.

Several other points of interest emerge from this story. First, that on its way to the origination of the first international exhibition the Society of Arts held the first exhibitions of industrial design; second, that this series of exhibitions, like the earlier ones, had its roots in prize competitions; third, that small exhibitions can have big results.

Exhibitions, large and small, played an important part in the Society's history during the latter half of the century, and, conversely, the Society played an important part in a great many of the exhibitions held during that period. Generally speaking,
However, it may be said that, in keeping with its history, it has mainly been in new forms of exhibition that the Society has been interested. Thus in 1852 it held the first public exhibition of photography and in 1854 the first educational exhibition. In more recent times, the Exhibition of British Art in Industry, organised by the Society in 1935 in conjunction with the Royal Academy, besides having many other important results, such as the founding of the Faculty of Royal Designers for Industry, established the principle of reserving to the promoters complete control over the selection of goods for exhibition. It is upon this principle that subsequent design exhibitions, such as Britain can Make it, have been based and the exhibitions for the Festival of Britain 1951 are being planned. The Design at Work Exhibition, sponsored last year by the Society in conjunction with the Council of Industrial Design, was the first collective exhibition of the work of Royal Designers for Industry.

Lectures and Publications

Let us now consider a third branch of the Society's activities—its use of the spoken and written word. To begin with, the Society was in no sense a learned society. It came into existence to do things. But it was not long before it was realised that words were an essential complement to deeds. It was all very well to give Farmer X. a medal or a sum of money for a piece of agricultural advance carried out by him in his fields, but unless other people heard about it and copied it, the money was virtually wasted. Yet little was done for nearly twenty years to spread the invaluable information which all the premium work brought in. By the unofficial action of some individual members of the Society, notably Robert Dossie, spasmodic attempts were made to publish some of this material, but for a long time the only method of getting a copy of the important communications made to the Society was to pay the Assistant Secretary (with the consent of the Society) twopence per 100 words to write it out by hand! And this, in spite of the fact that most premium lists (like the one for 1764 already quoted) specifically asked for reports to be sent in by candidates for certain classes of premiums. It was only in 1783 that the first volume of the Transactions appeared, and these were only published annually, and at even less frequent intervals after 1830. Truly, publicity has not always been the Society's forte!

The Transactions, which thus originated from the premium competitions, were likewise largely confined in their contents to the publication of their results. Though, therefore, they contain much of value, their interest decreased with the decline of the premium system; and when, after the institution of a Council to conduct the Society's affairs, the nature of the weekly meetings changed and time became available for the reading of papers and the delivery of lectures which had nothing to do with the offer of premiums, an entirely new type of publication was called for. An additional circumstance brought the matter to a head. As has been mentioned already, the Society formed a Union of Institutions, and one of the services which it was desired to make available to its members was information regarding the papers which were being contributed to the presiding Society. It was primarily to supply this need that the Journal was started in 1852, and, appearing every Friday, it contained a full
report of the meeting or meetings of the week. Because information for the associated institutions was so material a factor, the original title of the publication was *The Journal of the Society of Arts and of the Institutions in Union*. Soon the *Journal* will be celebrating its centenary, and the present issue is numbered 4786—no mean record of publication.

Of its contents it is quite impossible to begin to speak—of the range of the topics, the fame of many of the contributors, and the practical effects which they achieved. This series of ninety-seven volumes must surely form a record quite unequalled in its authoritativeness and scope, of progress in almost every field of human activity. They contain the first announcement of many important inventions—notably some of Marconi's—and their influence has gone out to the ends of the earth. A remarkable example of the far-reaching effects which a single paper can have is the lecture delivered by the late Sir Albert Howard in 1935 on the Indore process of humus manufacture and duly published in the *Journal*. Copies of this paper are still applied for from all parts of the world by people who intend to put its principles into practice, and although some aspects of the lecture may be a matter of controversy, it cannot be questioned that through the improved soil fertility to which this lecture has led in so many places it has directly resulted in the production of great additional quantities of better quality food of many kinds. Here is Shipley's principle still at work, though in a different way. Through the trifling expenditure connected with the holding of a single meeting and the publication of one issue of the *Journal*, vast results have been achieved.

In concluding our consideration of this important aspect of the Society's work, reference must be made to the manner in which the effect of its meetings is often greatly multiplied through the co-operation of the Press. The delivery of a paper before an important Society such as this gives it a "news value" which its mere publication in a journal would not achieve. Much of the most valuable information imparted to the Society is, therefore, through the general and trade Press, passed on very rapidly to an extremely wide audience.

**Projects**

The remaining form of activity which must be dealt with in this brief survey is what may perhaps be described as "projects". As an independent body the Society has, from time to time, used its funds and organisation for various undertakings in the public service. These have usually been pioneering efforts of differing kinds which have not been continued permanently by the Society.

Here again it is easy to trace things back to the premium method. It was only a step from publicly offering a prize for the completion of some task to commissioning a particular individual to carry it out.

The first case of this kind arose in connection with the supply of fish to London, which at that time was most unsatisfactory. A certain Captain Blake approached the Society in 1761 with a scheme for bringing fish up from the ports by road, and his proposal was taken up with enthusiasm by the Society. Prizes were offered for designs for the special vehicles which would be required, and when these had been obtained and the vehicles were made, Blake was commissioned to organise the whole scheme. He undoubtedly achieved considerable results, assisted by the action of
Parliament in securing, at the request of the Society, the lowering of turnpike charges on the routes which he used. The Society was not, however, prepared to go on financing him permanently, but it did not give up its part in his scheme until it had expended over £3,500 upon it.

A very notable project undertaken by the Society last century was the establishment of the National Training School for Music. The planning of the school and the raising of funds wherewith to endow with scholarships all the first students occupied most of the energies of the Society for a period of years. The Society’s connection with the school, once it was established (in 1876), lasted for only a few years, as the school was reconstituted in 1882 as the Royal College of Music. But the result of its labours remains.

A comparatively recent endeavour of the Society was the raising of a Fund in 1927 for the Preservation of Ancient Cottages. The Society had noted that while much was being done for the preservation of larger and more historic buildings, no provision was being made, on a national scale, for the preservation of ancient cottages.

— one of the richest heritages of our countryside which was rapidly being whittled away. A substantial fund was raised in response to the Society’s appeal, and by its means the whole village of West Wycombe, and the famous Arlington Row in the Cotswolds, were reconditioned, and ultimately made over, in a thoroughly habitable as well as beautiful condition, to the National Trust. As with other projects, the Society did not continue this work indefinitely, but it did enough, in a sufficiently
spectacular fashion, to draw the nation's attention to the problem, and the effects went far beyond West Wycombe and Bibury.

The greatest of all the Society's projects, and the only one which it has continued permanently, is its commercial examinations. These were started in quite a small way in 1852 in connection with the Union of Institutions. It was felt that some form of examination held locally and offering papers in single subjects would be a great encouragement to serious spare-time study by the members (who were mainly "artisans"). For some twenty years the examinations continued largely to be conducted in connection with the Union, but as time went on there was a wider demand for them, and arrangements were made for entry to be thrown open to all candidates. The two basic principles, however, were maintained, that the examinations should be held at local centres and in single subjects.

For a considerable time the examinations covered a very wide range of subjects, including technology, drawing and music, as well as the more strictly classroom subjects. The bias was, however, always more particularly towards what are known as commercial subjects, and it was around this group that our system finally crystallised. In the course of the present century the number of candidates has increased enormously. In the year 1900 there were less than 10,000 papers worked; in the year 1948 there were nearly 118,000. The recent great changes in the whole field of education have not so far affected the demand for—and by inference, the usefulness of—the Society's examinations. In fact, the main anxiety at present of the staff of the Examinations Department is lest they be called on to undertake fresh commitments before several new types of examination inaugurated since the war are "run in" and working smoothly. But such a state of things is what we desire above all things, for the Society stands or falls by its potentiality for usefulness.

CONCLUSION

Two hundred years ago William Shipley was already cogitating the scheme which subsequently gave rise to this Society, and we are now beginning to plan the celebration of the bi-centenary of its foundation. Why has the Society gone on for so long and been so successful and useful? I would suggest three main reasons: first, because it is based on a general principle of public service and has no particular axe to grind. It thus appeals to public-spirited men in all walks of life, and of all political and religious creeds. Secondly, because its purpose is essentially practical. All the time the prompting thought has been "What can usefully be done now?" and if some useful job, within the Society's powers and outside the scope of other bodies, has presented itself, the Society has been ready to take it on. Thirdly, because the Society has on so many occasions been fortunate in its leaders. On that has depended its success all the way through.

Happily, all these three factors are persistent qualities which we can hope will survive even in the very changed conditions of the present time: a broad basis of interest, practical willingness to do a job, and able leaders whom these first two factors attract and inspire. We may, therefore, look forward with confidence to a future as full of interest, adventure and usefulness as the past has been—and still deriving ultimately from the idea which came to William Shipley at the horse fair of Northampton.