The British Organ from 1850 ISO lecture July/96 - Stephen Bicknell

By a quirk of fate that has amused us both, Nicholas Thistlethwaite and I are appearing at this congress disguised as each other. Dr. Thistlethwaite has spoken about the early English organ, an area of particular interest to me, and I am talking, amongst other things, about the Victorian Organ, a subject on which the good Doctor is regarded as the great expert. I don't think either of us are at all disturbed by this apparent reversal of roles. Apart from the private pleasure of trying to be versatile and generally well-informed, I believe that both of us would wish to demonstrate that we are part of a community of many individuals within the British organ scene. This community places great emphasis on openness and co-operation, and aims to raise standards through the mutual benefits brought by exploration and learning.

For example the fact that my book on the History of the English Organ is appearing this week is not an indication of a personal achievement or an individual view, but rather of an attempt to collect together the results of recent research by dozens of individuals and to present it in a way that should be acceptable or at least stimulating to all those who have taken part.

Forty years ago this glasnost did not exist; English organ building was isolated and arguably backward, with much of its surviving qualities hidden by a kind of Spotted Metal Curtain. Thanks to the example and enthusiasm of a new generation of players, historians and organ builders that wall now lies dismantled and its rubble is being cleared away. When the ISO visited this country on previous occasions the experience will have been interesting, but I very much doubt if any visitors from abroad would have felt that they had learned anything that would be useful to them in the future.

The theme of this talk is based on my conviction that now is the time to take the British organ seriously. From Dr. Thistlethwaite you will have learned something of the complex and rather peculiar history of the English classical organ, and at the end of his lecture you will have been left in suspense at the start of the great organ-building revolution of the 1840s. What emerges after 1850 is one of the greatest organ schools of all time: practical, assured, artistic, refined, and astonishing for its combination of quality with high volume production. The sheer number of organs and organ builders from the period 1850-1900 is an immediate indication that we are not dealing with an insular or isolated school. From 1850 the British organ stands alongside its foreign relatives as a major force in the world at large, and I invite you to consider it alongside other schools, such as the French romantic organ, the North German organ of the late seventeenth century or the Iberian organ. For those who know North American organ building much of the territory will be vaguely familiar - after all we share a language and many common roots. For those who do not come from the English-speaking world I respectfully offer the suggestion that there is an important voyage of discovery to be made by those who wish to learn how the craft may evolve in the near future.

With such a great deal of material to cover, I have applied a system of compression to this lecture. The mere facts, the nuts and bolts of the case, have been listed on two sheets of paper identifying crucial names and dates.

These lists are not remotely complete: I have given only sign posts and your individual interests will allow you to explore further using these notes or my book as a guide. Nor on this occasion have I used slides as illustrations, for the organs you see on this visit will be the ideal visual and listening guide.

A mere glance at the list of builders will immediately reveal to you that there are as many great names from the industrial era of British history as from the organ-building schools of half a dozen smaller nations, and I ask you to understand at once that the romantic organ in this country is not one school of thought, but many, and they are all different from each other. My next request is that you consider the question of quantity. In Germany the Sauer firm took fifty years to reach its opus 1000; In Britain such targets were passed quickly by even the provincial firms. Harrison and Harrison of Durham built 1000 organs in about thirty years; Norman & Beard of Norwich could build a thousand organs in only seventeen years. In France the workshop of Cavaille-Coll employed 52 men in 1860; In Britain this would have been a modest workshop - at one time Norman & Beard employed 300.

Finally there is the question of quality. Could production at such a volume be combined with high standards? The answer is yes. Though the British organ is not associated with some of the neo-classical virtues - the design and layout is often peculiar, the cases are usually poor or non-existent, the key-actions are not always responsive - there are other areas in which the quality and attention to detail exceeds that of any other school. I ask you to consider the standards achieved by the craftsmen in the organ factory: the soundboard makers, sticking loyally to the slider chest in all but a few cases; the action makers, developing some truly remarkable versions, for example, of tubular pneumatic action - versions which completely contradict the reputation for sloppiness and unreliability which these actions have in other parts of the world; the pipe makers, turning out wood and metal pipes to incredible precision - and sometimes to very unusual designs; and finally, the voicers, who raised the art of refined and stable tone to a pitch of perfection that we can only dream of emulating. All these qualities were maintained in this country through wars and depression, and only began to fade as a result of the very uneven application of neo-classical principles and the general shrinkage in organ building in the period after the Second World War.

What makes the story of the British organ still more interesting is the remarkable achievement in finding a completely new voice and forging a completely new tradition from the very insular and eccentric attempts made in the early nineteenth century. The revolutionary change to the German System of C compass manuals and complete Pedal Organ was accomplished in a matter of ten years or so, and by the time the Great Exhibition opened in the Crystal Palace in London’s Hyde Park in 1851 the new school was already showing signs of maturity.

The Crystal Palace is itself a model for the speed and efficiency of Victorian Britain. This building, large enough to enclose fully-grown trees, large enough to have its own weather - it used to rain from time to time - was designed, built and opened to millions of visitors in six months, using one third of the entire glass production of Britain for that year. Beneath its

humid and bird-infested arcades stood several organs. That by Gray & Davison was a three manual instrument that would have been recognised and admired by any European builder; that by Willis had seventy stops, Barker action, and pneumatic stop action with pistons. However, two of the foreign visitors had a great impact on account of their quality of materials and their gutsy tonal schemes - they were much louder than the English equivalents. Charles Spackman Barker was responsible for the Ducroquet exhibit, which cemented the idea in the English mind that the French builders knew all there was to know about quality (it cost twice as much as an equivalent British organ of the same size). And then there was the Schulze .... but of Schulze we must talk on another occasion.

Driven to undertake yet further reforms in standards of materials, design, layout and voicing, there emerged in the 1850s and 1860s several alternative voices, each very much part of the mainstream of European romantic style. Amongst them it is easy to identify German influence on Hill and even more on Lewis, and French influence on Gray & Davison. French influence has also been claimed for Willis; I disagree entirely, and believe that the appearance of certain French ideas in Willis organs is simply his expression of the need to make new organs conform to general continental standards; Henry Willis's artistic vision is quite individual and influenced by no-one. Then there were traditionalists, Bishop, Walker and Holdich who preserved more ideas and influences from the old school, but using the latest layouts, stop-lists and mechanisms.

Nevertheless, there are features that link all British organs from 1850 until the Second World War, and it will be useful to identify some of them.

First, and most important, the obsession with the sound of the 8' Principal or Diapason. For some reason that I cannot fully understand the Diapasons were always the outstanding tonal feature of the British organ, and I suspect that even in the eighteenth century an organ was judged by the tone of its diapasons first, and everything else second. In the nineteenth century the development of this 8' tone was carried to every possible limit, and an appreciation of this national mania is at the root of our story.

Once Schulze had shown the English a principal with a wide mouth and open foot there was no stopping them. Hill made the scales large and the mouths high, producing a bold but somewhat fluffy tone. Willis made the mouths narrow but blew the pipes very hard and sometimes slotted them; the result was bright and sometimes stringy. Walker made giant versions of the old English type, keeping the mouths wide and low, but increasing the scale sometimes to a monstrous 8 inches or 200 millimetres at 8' C. Only Lewis stood away from this frenzied activity, maintaining his allegiance to the German chorus where all ranks are essentially equal.

With the Diapason making such a commanding statement it is no surprise to find that the whole attitude to the flue chorus is different to that found elsewhere. We should remember that there is no Plein-jeu or Grand-jeu in the English tradition. In the eighteenth century it was understood that mixtures were not usually heard without Trumpets drawn as well. And, apart from the possibilities encountered in the more German-influenced organs of the

nineteenth century, this remains true until the classical revival. The chorus is modified considerably in the organs of Willis, and this is typical of the extreme version of English thinking. The English have always stated that Willis's voicing is strong in the treble. This is true for the soft stops and for the reeds, but the balance of the entire instrument is totally dominated by the bass. Firstly the colossal Diapasons and matching open wood 16' stops on the pedal make a louder noise than any other fluework in the organ. Secondly, though the reeds are controlled by heavy weights in the bass, the resulting tone is so smooth as to blend with the flue basses and drive them still further forward. Meanwhile, in the treble the common practice of making the upperwork small in scale and bright in tone is at its most remarkable in the instruments of Father Willis; thus the upper reaches of the keyboard are notable not for the melody as much as for sparkle and reedy intensity - especially with a tierce in the mixture.

This Willis ideal will be familiar to many, and it is often stated to be entirely typical of the British scene. This is not quite the case. Willis did not become famous as quickly as used to be thought, and was not regarded by his contemporaries in a favourable light until after 1870. Few aspects of his style were actually imitated until after his death in 1901. The other builders used voicing and balance more like their neighbours in France or Germany, and yet a slight tendency to bass-heaviness was common to them all.

Still more interesting to us today, perhaps, is the fact that all of them had enjoyed the successful results of an attempt to marry German and French elements. And this was a true marriage, not mere eclecticism. A really good Hill organ of the 1860s would have had a flue chorus that would have been admired by any German musician or builder, and yet it would have had a tutti dominated by batteries of high-pressure reeds, just like a French organ. With its enormous Swell organ and sophisticated console arrangements, it was arguably more expressive and more colourful than either. And yet its voice would have been quite identifiably British in every detail.

Our attention must now turn to the Swell - the most important part of any British organ! Well, I exaggerate, for it was only in the later romantic period from 1900 on that the Swell organ really came to dominate the whole instrument (and sometimes to house the only mixture on even three manual organs), but it is still true to say that the Swell division is very nearly as important as the Great - it is usually, in fact, a second Great organ in a box. This is indeed exactly how it is used. Throughout the period of this lecture the Swell to Great Coupler is more often on than off. The Swell extends the possibilities of the Great organ and allows that extraordinary British phenomenon - the 'build-up' - a seamless crescendo from soft enclosed string tone at the start to full organ at the end, an effect whose popularity still completely exceeds that of any other registrational effect. It also, at its most extreme, allows the Great organ to become so loud that parts of it can only be used for special effects - but that you may judge for yourselves.

With these various methods at work, it is not surprising to find that conventional upperwork has a limited role to play. Hill, Lewis, Walker and some others always knew how to make good quint-and-unison mixtures and continued to do so up to 1900; in the Willis organ the mixtures have become

narrow scaled Cornets, designed to bridge the gap in tone between the flues and the reeds, not to be heard in their own right. It is not surprising to find that once the development of ultra-smooth tone started around 1900 those few mixtures that survived were reduced until they were only producing colour, and that of a rather acid kind.

And finally there is the reed tone, and again a variety of styles to consider. High pressures came very early - 12 inches (300 millimetres) in the Hill at Birmingham Town Hall in 1837. The Cavaille-Coll method of using high pressures for chorus reeds in general was widely adopted in the 1850s. By 1867 Willis had developed his own high-pressure system, devising a unique and brilliantly engineered family of Trumpet voices, on pressures from 7 inches (178 millimetres) in organs of 3 manuals and thirty stops or so up to an occasional 25 inches (635 millimetres) for the most frightening of his Tubas - and, incidentally, to colossal effect in the bass of Pedal reeds, where even the heaviest of brass weights on the tongue could not obscure the almost unmanageable power of the result.

Let us not forget the console and its accessories, for here of course the British excel. It is true to say that some of that excellence is owed to Willis, who seems to have been aware of the science of ergonomics long before the first ergonomist, and who introduced angled stop-jambs, thumb pistons, and the radiating and concave pedalboard. But the British were already used to engraved ivory stop-knobs grouped tidily by department according to a system common to many builders. They were already used to combination actions, to couplers operated by stop-knobs, to swell pedals, and to the highest cabinet-making standards in the fitting of veneers and the polishing of surfaces. They were also already used to silent, reliable, and easily maintained key actions, having adopted bushing and tapped wires with adjustable collars at the end of the eighteenth century.

This early maturity of the new style was achieved thanks to massive expansion in the craft of organ building. It is difficult to know where to turn. In the Cathedrals and Colleges the English choral tradition was being revised and expanded. The High-Church movement stimulated revival, debate, and growth on all sides. The wealthy industrial classes ploughed their profits not back into industry - to the lasting disadvantage of the nation - but into good works such as the building of churches.

Music-making was an industry in Britain, already independent of Kings, Lords and patrons for the last century and a half. The public ate new organs for breakfast, lunch and tea - they were the great public entertainment of the nineteenth century, and their makers were household names. The growth was astonishing. Where Hill had struggled ineffectually with his giant organs of the 1830s, he and his many rivals built larger organs still by the hundred within a few decades. No estimate has been made of how many organs were built in this country between, say, 1850 and 1900. My guess is that the figure would approach 100,000. Most of them were good, a few were extraordinary. Towards the end of the life of the Hill firm, they turned again to the giant organ, building in 1890 the celebrated monster at Sydney Town Hall in Australia with its five manuals, its 64’ reed, its magnificent case, and a responsive tubular pneumatic action which lasted for over eighty years before

its first complete restoration. This is widely regarded as one of the world's finest organs.

With this background in mind, let us turn back to the chronological narrative. Much of it follows predictable lines. I need not outline the tendency towards smoother and ultimately more orchestral tone. I need not dispute with you the question of decadence towards the end of the 19th century - you will all have your own views on this and other subjects - and the general tendencies in 19th century art are familiar to all of us.

In the 1850s and 1860s Hill and Gray & Davison divided the spoils and prestige between them. These two firms and their allies were largely responsible for advocating the German System and for sweeping away as many GG compass organs as money would allow. Willis wanted to join them, even perhaps to exceed them and become one of those great Victorian figures like the engineer Brunel. For the time being he had to suffer the reputation of being an impudent upstart. The fact that his first big public organ after the Great Exhibition (the 1855 organ at St. George's Hall Liverpool) was regarded as a failure did not help. This instrument had long-compass keyboards, unequal temperament, a very peculiar tonal scheme (all of these the responsibility of the consultant, S. S. Wesley) and some of its tonal experiments were unsuccessful. All these faults were rectified in a rebuild in 1867, but in the meantime Willis had to wait for the recognition that his technical genius deserved.

His chance came, for what was already clear was that his organs worked better than those of his rivals. When a new organ was wanted for the Royal Albert Hall in London in the 1860s, Willis suddenly sprang to the fore. Some slight evidence and a good deal of instinct and imagination leads me to believe that Cavaille-Coll was originally intended to build this organ. It is possible that a banking crisis and ensuing depression made it impossible to carry out this intention.

I guess that Willis was already admired for his efficient production, his low prices, and his mechanical perfection. Any tonal matters could be settled by asking him to use Cavaille-Coll's scheme as a starting point and as a bench mark for quality - hence the tin 32' front and the apparent French influence.

I emphasise that these are guesses only. The facts of the matter are that Willis was suddenly asked to build the largest organ in Great Britain without, as far as we know, his rivals being seriously considered. The organ was still criticized by some - the organist W. T. Best asked Willis to demonstrate the Diapasons. Willis's first chords were interrupted by Best roaring from his seat on the other side of the vast hall 'I said your Diapasons, Willis, not your damned Gambas!' Yet the success was his, and when, shortly (and perhaps significantly) after the death of William Hill in 1870, he offered a divided organ with tubular pneumatic action to the Dean and Chapter of St. Paul's Cathedral, fame was at last his.

Initially it was this technical achievement which made his name: a conventional Barker-lever action organ was split into two: those parts remote from the keyboards were played via a simple pneumatic relay under the floor. The remaining links and the entire coupling action were mechanical as usual.

Similar organs were immediately commissioned for the Cathedrals at Salisbury and Durham, and these instruments and their immediate contemporaries were followed by an unbroken line of commercial success that lasted until Willis's death in 1901.

Though Willis was only one amongst many great names, and was still alone in his pursuit of an eccentric though eminently successful tonal ideal, he so dominated the field as to produce some resentment. Lewis's Schulze inspired Germanic style was in direct opposition - Lewis is reputed to have said: 'if I thought Willis was right I would shut up shop tomorrow'. Later in life Willis was also resistant to change, and his tonal schemes were always followed predictable lines and were usually repetitive. At their worst they were simply unimaginative, but Willis's detailed control of every aspect of production and voicing meant that there never was a bad Willis organ. Younger men wanted to experiment more; they were not welcome in the established firms and they had to try and make their name as independents.

Hence, the appearance in the 1880s of some radical ideas. The most musically fascinating example is the one surviving organ by Michell & Thynne, now at Tewkesbury Abbey; this is one of the most remarkable, versatile, and dynamic romantic organs ever made, and an obvious source for any serious student of the 19th century. However, the most influential is undoubtedly Hope-Jones.

I do not share the opinion that Hope-Jones was in some way a 'bad' organ builder, however much his beliefs represented the extreme opposite of the classical revival that we enjoy today. He was an extremist, and his organs are as full of artistic instabilities as the man was unstable himself. These are the organs of a man perpetually on the edge of a nervous breakdown. He rose, became manic, stumbled and fell on several occasions, moved to America to avoid scandal, set Wurlitzer on the road to success, and killed himself.

He did, however, invent the modern electro-pneumatic action. In 1887 he could demonstrate an organ with integrated armature and valve in the chest magnets, in which the current consumption was kept down within the range of battery supply, and combined with a radical design of console and fully electro-mechanical switchgear and coupling.

The established builders were at this time completely convinced by their own latest plaything, the all-pneumatic action with pneumatic combinations and couplers - and it has to be said that the best British pneumatic actions are nearly as satisfactory to play as a good Barker action and have proved reliable and well worth restoring. As a body they rose up in outspoken and personal invective against Hope-Jones; that and his inability to stay abreast of any real commercial considerations ultimately destroyed him.

In practice the various subjects raised by Hope-Jones work were indeed appropriate to the age, and he was by no means alone in his technical and tonal experiments. More to the point, he was profoundly influential in both Britain and America, and for two generations every English speaking organ builder knew what the name Hope-Jones stood for, even if he claimed to find his extremes rather distasteful.

Queen Victoria died in 1901 and in the same year Henry Willis (or 'Father' Willis as he had been known publicly since 1898) also breathed his last. I do not know enough about English history to say what the effects of the end of the Victorian age really were, but in the Willis family there was a desperate crisis. The succession struggle between the two sons, Vincent Willis and Henry Willis 2 lasted for six years, and the after-effects of this sad period were to make it impossible for the firm to move anywhere except towards decline, and the last moments of glory are to be found at the beginning of the career of Henry Willis 3.

A word here about Henry 3 - an extraordinary man whom some of you will remember personally. I cannot emphasise enough how difficult were the circumstances in which he succeeded to the Willis tradition, early in life when his education in the craft was complete but his experience of the wider world of organ building hopelessly small.

By sheer force of personality he made a success of his early great projects at Liverpool and Westminster Cathedrals. But in the 1920s he made what must be one of the worst decisions in the history of organ building - he said goodbye to G. Donald Harrison, the great tonal genius of the twentieth century, and adopted a whole set of ideas from E. M. Skinner, none of which increased his popularity or success and some of which - like the French Horn and the Erzhaler, reinvented as the Willis Sylvestrina - left him firmly wedded with the worst excesses of the much criticised orchestral style.

The position of the Willis firm declined. At the time of Father Willis's death the obvious competitors were J. W. Walker, newly raised to special status thanks to their organ of 1897 at St. Margaret's Westminster, built for the famous recitalist E. H. Lemare in his last church appointment, and Norman & Beard of Norwich. By the time these two firms had built the first notable organs of the twentieth century it had already become clear that there was a third challenger in Harrison and Harrison of Durham. In 1904 they built, to the designs of George Dixon, a remarkable three manual organ in a new symphonic/orchestral style in the remote north-western town of Whitehaven. Despite its isolation this organ immediately became famous, and secured Harrison's the equally important contract for the complete rebuilding, rearrangement and revoicing of the Hill at Ely Cathedral, completed in 1908, also in collaboration with Dixon.

Arthur and Harry Harrison had suffered in their early careers from the less than perfect reputation enjoyed by their Father Thomas. They set about correcting matters with considerable determination. Harry Harrison perfected new tubular pneumatic and electro pneumatic actions of indestructible quality. Workmanship and materials in the rest of the work never fell below the excellent. Arthur Harrison committed his life to the tonal work of the company, and everything he touched added to his success.

The custom in Britain from a very early period seems to have been to voice the pipes in the factory. We have evidence from the nineteenth century that voicing jacks or machines were in widespread use, and indeed that voicing in the church (as practised by Schulze and by his imitator Charles Brindley) was very unusual. On site the British builder only needed to regulate the pipes for loudness and softness, hence the need for very careful attention to

pre-determined detail in the factory stage of the voicing to make sure that every instrument carried the tonal stamp of the firm that made it. The use of a small organ as a voicing aid in the factory may even originate as early as Snetzler in the 1750s.

Whatever the actual history of this practice may be, Arthur Harrison attracted attention not just because of his charming personality and his polite deference to his clients (an attitude which convinced every customer that they had contributed in some way to the Harrison image), but also because of his obsessive attention to detail in the final regulation or balancing in the church, a task which he raised to an art in its own right.

Harrisons were so succesful as to eclipse all their rivals and to force other organ builders into imitation of their style. Meanwhile the Willis company was in the middle of upheaval, ultimately to merge with the ailing Lewis, and Norman & Beard ran out of money and had to move in with the by now ultra-conservative Hill firm in London. These marriages were not happy in every detail.

The truth is that the death of Queen Victoria was followed by the decline of the nation and Empire. By 1910 the first depression of the century was eating in to the organ-building trade, as was the fact that the market had been flooded with hundreds of good quality instruments that were even then quite new and shiny (exactly the problem faced in Northern Europe today). All the factors that had made the Victorian age special for organ builders declined too - church attendance dwindled, congregations began to drop in numbers, music making changed, public entertainment moved on to new and more exciting toys like the cinema and ultimately the radio and television.

In this atmosphere of change and even of decline, Harrison and Harrison made their name by reason of quality. Despite the effects of the depression they applied their rigorously high standards to all their new organs and also, as far as they could in the circumstances, to the many rebuilds of famous Cathedral organs carried out up to Arthur Harrison’s death in 1936. By that time they controlled every aspect of music-making in the major buildings of the Anglican church, and the Harrison sound was and still is indelibly associated with the further great flowering of the English choral tradition in the first half of the twentieth century.

The only distinctively different voice between them was that of John Compton. The fact that the Compton firm made cinema organs in large quantities and used extension in their most famous new organs - the Compton masterpiece at Downside Abbey has over eighty stops derived from thirty ranks - should not lead one to imagine that the Compton organ was in any way cheap or nasty. Compton was the only brilliant exponent of the unit organ - extension was used selectively and ingeniously to produce something that very closely resembled its ‘straight’ counterpart. The engineering, particularly in the field of electric actions and console accessories, was quite brilliant and well up to the standards achieved by the best American builders. The tonal schemes were remarkable. Compton used many techniques derived from Hope-Jones, and assumed the use of very high pressures - typically 4 or 5 inches (100-125 millimetres) for even normal fluework. He also made a speciality of organs sited in

difficult chambers. However, he understood the need for real upperwork, which he again handled in an ingenious way.

Harrison and Harrison had already made widespread use of the flat 21st or septieme in their mixtures from 1904 onwards, and the acid tone generated by this rank is characteristic of their larger organs. Compton went much further, exploring ninths, elevenths and even more remote harmonics and using them with practical result in the 1930s. He also introduced the British public to a whole range of mixture stops they had never heard before - Plein Jeu, Cymbale, Acuta and so on.

But these were not classical organs. With such a strong late romantic school in full flight, it is not surprising that the classical revival on the continent was at first reported as a peculiar foreign disease. The American classic movement was perhaps better known, but every time it was mentioned in the musical press Henry Willis 3 would reply in writing, using a tone that made it clear a) that G. Donald Harrison was merely his protege and b) that his approach was interesting to study but quite unsuited to the British situation. A classical organ arrived in this country in 1936. Designed by Johann Nepomuk David for the home of Susi Jeans, made with mechanical action by Hill Norman and Beard and with pipework made and voiced by the German firm of Eule, it was and still is virtually unnoticed.

After the Second World War the economy was crippled; as we now know, the devastation to the industrial and economic base in this country was far-reaching, even if the actual destruction did not equal that endured in Germany or Japan. When, in 1950, J. W. Walker built a new three manual organ in Oxford, it was the first substantial all-new organ to be built since the war.

However, thanks to the vision of one man, Ralph Downes, classical revival was to be attempted on the grand scale. By 1954 two radical examples of new thinking could be heard: the Walker built for Downes at the Brompton Oratory in London and the larger Harrison and Harrison at the Royal Festival Hall.

The path taken by the classical revival in Britain is a fairly straightforward one, its own local colour derived from the fact that it arrived late, in the face of considerable conservative opposition, and that it coincided with a long period of economic difficulties in which every British industry suffered from extreme problems of production and quality.

This is all very recent history, and I am going to pass very briefly over the final arrival of the first significant all mechanical organ in this country, the Frobenius at Queens College Oxford installed in 1965, over its various imitators, both successful and, unfortunately, unsuccessful, and the various moves made by companies both old and new to adapt to the change in taste and techniques. The people who engineered these changes surround you today and they can tell you in their own words how they have achieved their results.

I should however mention the emergence of the Mander firm after the second world war. I do so partly on account of the loyalty I owe to the company that used to employ me, but also because this is a company not quite like others

and in a way it illustrates well what makes the British organ building scene unusual today and of interest to the world at large. In the work of Noel Mander and more recently John Mander one can see a combination of wide and cosmopolitan interests with genuine respect for the nation's past, and an atmosphere in which all influences, both classical and romantic, are regarded as legitimate areas of study and interest. For a company like Mander, or, for that matter, Harrison and Harrison under Mark Venning, new mechanical actions are considered normal and built to a high standard, yet exist happily alongside the restoration of other mechanisms, including the most devious of the tubular pneumatic systems, and the use of high-quality electro pneumatic actions and slider chests in certain large projects.

With questions of classical revival now largely settled, these companies are now turning back to the traditional British obsession with quality, though the scope of their brief is now wider than before. You will see in this country the old love of quality finish at the bench - you will never see invisible components so beautifully polished.

You will see that the art of console making is still carried out to the highest standards, and to those of you who are struggling to find a way of making really good consoles for eclectic organs I seriously suggest that you study what is going on here - examples by Mander, Harrisons and Walker are all of above average standard, some of them are almost the last word in luxury, beauty, comfort and ease of control.

Thanks to the work of David Graebe for Walkers, the art of case design has been revived in all its pre-modern-movement glory and, in a country where modern design was never universally admired, it is almost certain that the organ case with no mouldings and no carving is dead or at least terminally ill. Finally there is a spirited revival in the great English art of voicing.

Seventy years ago your forebears in organ building might have attended the conference in Freiburg at which the principles of the emerging classical revival were first publicly stated. Today things are not so clear. Some are building modern classical organs, some are building in historic styles. Some, through the pressures of the world market, are building their first big eclectic organs and are finding the change hard to make. Some are pursuing a revival of the Cavaille-Coll tradition or of other romantic styles. There seems to be no thread here to grasp, nor any clear path to future success. I feel I can offer some guidance. Standing back for a moment from the varied activity that makes up organ building today I feel quite certain that we are entering a period of artistic revival, in which the individual statement and the creative brilliance of particular tonal architects will again be much discussed.

The reasons are very complex, and I do not wish to pre-empt your discussion by revealing them all at once. However, I ask you to consider the fact that, in a world dominated by factory production and high-tech solutions, where the electronic organ substitute has made such headway, the building of real pipe organs is now one of the last and most splendid areas of traditional hand craft to survive in the west. With high art on sale only at the most outrageously inflated prices, it is becoming one of the most remarkable and

cost-effective ways that the public can indulge its taste for and its love of the individually designed and hand-made creation - and on what a glorious scale.

The only route to survival in the twentieth century is to accentuate the palpable difference between the luxury of organ building and the thousands of cheap throw-away items that litter the planet. The organs of the future must of course be a mass of carving and decoration, just as they were in the eighteenth century and before. Their musical beauties must again astonish the listener and cause both awe and delight - this must surely bring the arts of tonal invention and voicing back into fashion. Each builder must establish their artistic position - and they may be building in a tradition derived from any past century or area or even in a style which is entirely their own invention. And yet the result must carry a creative conviction far beyond that of other modern products, whether they are cars, computers, or electronic organs. For this task an artistic revival is essential.

Faced with a potential decline in the organ building industry - a subject which those of you in Northern Europe will understand all too well - the importance of the English experience is vital. Our depression came early; for the whole of this century we have experienced decline in our beloved craft and have adapted as best we can. The results are complex, even confusing, and the thread of the story may only have begun to emerge with the latest and best works of Harrisons, Walker and Mander, and in the work of their various smaller colleagues.

But what is clear, and here lies the message that is the substance of my discourse, is that the only route to survival in organ building is by unswerving dedication to quality. In the worst of times, those whose standards remain high are in a position to survive. Those who make economies in matters of substance are less well favoured. Our experience is the proof. The lesson of the British organ is a mixed one, yet within it lie many secrets. I hope you will give the subject the serious attention it has deserved for so long.

---

1) The great London firms of the mid 19th century

William Hill

- the great proponent of the ‘German System’ from c1840 on (in collaboration with H. J. Gauntlett)
- descended from the Snetzler line
- c1856 Hill & Son
- 1860s new version of German style, bolder and more heavily constructed
- 1870 William Hill dies, Thomas Hill and later Arthur G. Hill (famous case designer and draughtsman) follow conservatively in William Hill’s footsteps
- 1916 amalgamated with Norman & Beard (see below)

Gray & Davison

- Frederick Davison, Hill’s former partner and later rival
- from 1838 in partnership with the remains of the Gray family

• French influence through the enthusiasm of Henry Smart
• Gradually fades out of the picture after 1860 (closed 1965)

Willis

• Henry Willis, the great individualist and mechanical pioneer of the 19th century
• from 1878 in partnership with Vincent Willis and Henry Willis 2
• 1895 Vincent Willis leaves
• 1901 ‘Father’ Willis dies
• c1911 Henry 2 succeeded by Henry 3
• 1919 merges with Lewis (see below)
• 1924 visit from Skinner, leading to the arrival of G. Donald Harrison in America and the use of Skinner innovations in England
• Still in business under Henry 4 at Petersfield, Hampshire

Lewis

• Thomas C. Lewis, disciple of Schulze
• moved to start building organs by the arrival of the Schulze at Doncaster in 1862
• supported by the Courage brewing family
• 1901 Lewis & Company (Lewis himself forced to retire)
• 1919 merges with Willis

Walker

• Joseph William Walker working from the 1830s on, descended from the longest unbroken tradition in British organ building (Dallam-Harris-Bridge-England)
• Organs solid and conservative
• late 19th century (under J. J. Walker) emerges as a quality alternative to the conservative organs of Hill
• 1950s pioneers of tonal revival <MI>(with Ralph Downes)
• 1978 reformed at Brandon, Suffolk under Robert Pennells (now under Andrew Pennells) as the first large firm to build mechanical action organs as a matter of principle
• 1980s Successful export policy

Other notable London firms in the mid 19th century include Bishop,Bevington, Bryceson, Robson and many others. The list of ALL builders at work in London in the nineteenth century would be very long.

2) Some provincial firms of the mid 19th century

Forster & Andrews (north east England)

• from the 1840s the first provincial firm to challenge the London builders for quantity of output
• Influenced by Topfer, and slightly by Schulze
• Became conservative and Hill-like at end of 19th century
• Survived until 1950s

Brindley (north east England)

• Charles Brindley, disciple of Schulze
• organs more German than those of any other English builder
• Later Brindley & Foster

• from 1880s again German influenced
• specialising in efficient production and low prices
• Survived until 1960s

Kirtland & Jardine (north west England)
• the pioneers of the German System
• in cosmopolitan Manchester
• Influential on USA through Jardines of New York
• survived (mirabile dictu) until 1970s

Nicholson (central and mid-western England)
• a large family of organ builders emerging in the 1840s and operating in Rochdale, Walsall and Worcester
• maintained standards through 20th century wars and depression
• Still Survives!

Wilkinson (North west England)
• Small local firm
• still able to build a four-manual organ with Barker action and a 32’ front
• survived until modern times Telford (Ireland)
• Dublin’s answer to William Hill
• survived until modern times
3) Influential ‘Progressive’ builders, late 19th century

Casson (North Wales, later London)
• Eccentric visionary and ex-banker
• Extension on pneumatic action in 1880s!
• organs not reliable!

Michell & Thynne (London)
• Michell eccentric visionary and ex-brewer
• Thynne ex-Lewis voicer
• Brilliant proto-symphonic organ 1885 (sic, only one)!
• went bankrupt!

Hope-Jones (Liverpool, later London)
• Eccentric visionary and ex-telephone engineer
• All-electric action and switchgear in 1887!
• Unique tonal style!
• Completely mad!(Organs not reliable, went bankrupt, caused scandal, emigrated, invented cinema organ with Wurlitzer, turned USA on its head, committed suicide)

4) The main Builders working in the ‘Imperial’ style

Harrison & Harrison (Durham)
• No connection with G. Donald Harrison!
• A nineteenth century foundation emerging to prominence round 1900 in the second generation
• Arthur (tonal) & Harry (mechanical) Harrison develop new high-quality symphonic/orchestral style in collaboration with George Dixon from 1904 on
• Astonishing quality of workmanship maintained through the depression

• 1950s pioneers of tonal revival under Cuthbert Harrison (with Ralph Downes)
• Survives

Norman & Beard (Norwich & London)

• A high quality provincial company growing to huge commercial success under the Norman family in the 1880s
• flirtations with Hope-Jones and the progressive school leads to individual symphonic/orchestral style under Herbert Norman from 1904
• Norwich factory employs 300
• 1916 amalgamated with Hill & Son in London
• Norwich factory closes
• Hill, Norman & Beard survive depression on vast maintenance business and eclectic work
• 1950s pioneers of tonal revival under Herbert Norman (jnr) and later under John Norman
• Hill, Norman & Beard survives, now moved to works of former small provincial builder Cedric Arnold in Thaxted, Essex.

5) 2nd rank high-quality builders in the 'Imperial' style

• Taylor (Leicester)
• Binns (Leeds, influence of Schulze claimed)
• Hunter (London)
• Hele(Plymouth) - All now closed

6) Early twentieth century modernism:

Compton (London)

• John Compton started in Nottingham 1906 as the true successor to Hope-Jones
• later moved to London
• from 1920s with increasing influence from his friend and colleague Jimmy Taylor, unique tonal and technical style
• brilliant engineering, especially in electric actions
• committment to very high quality with every possible technical advance
• specialised in cinema organs (the only European rival to Wurlitzer)
• built many large instruments in which extension was used to artistic effect
• pioneered the very small, very cheap extension organ of which thousands were made by many firms (some are still being made today)

pioneering electronic organs

• Closed 1960s after death of Compton and Taylor

7) New traditionalism and early revival:

Mander (London)

• small independent started 1936
• 1950s & 60s the only company to grow
• pioneering concern for old organs and techniques of restoration
• pioneering tonal revival in 1960s and artistic revival in 1980s and 90s
• first new firm to be appointed to several English cathedrals since Harrisons, arguably at the expense of the Willis company
• new wave of high-profile successes under John Mander

8) The classical revival:

Collins

• Peter Collins, working North of London from the late 1960s, and influenced by Rieger.

• Recently moved to Melton Mowbray and style becoming more eclectic
• first new company devoted entirely to the building of new organs, all of which have mechanical action.

Grant Degens and Bradbeer (London, later Northampton)
• formed from ex Compton staff c1962
• under Maurice Forsyth-Grant suddenly moved to excellent English version of German neo-classical modernism (new materials, schwimmers, aluminium actions and pallets, extreme 'classical' revival, 'aliquot' mutations, plexiglass swell shutters, daring modern casework by Frank Bradbeer.)
• closed.

Tickell (Northampton)
• Ken Tickell, ex Grant, Degens & Bradbeer, pursuing a more civilised version of the classical revival
• The fastest growth of the last decade

Jones (Dublin, Ireland)
Kenneth Jones, ex engineer, with a personal and successful version of neo-classical style

9) New traditionalism
Goetze & Gwynn (started Northampton, now near Nottingham)
• Martin Goetze & Dominic Gwynn, from 1982, working in English historic styles

Drake
William Drake, trained in Germany, at at first pure classical revival - now reviving personal but academically correct version of pre-1850 English tradition

Some important dates
1851
• Great Exhibition (Crystal Palace) London - organs by Gray & Davison (3m), Hill (2m), Ducroquet (Paris, 2m), Schulze (Paulinzelle, 2m) and others, large 4m Barker organ by Willis with pneumatic stop action and pistons
1853
• Royal Panopticon - 4m Hill with Barker action, equal temperament, continental tonal scheme, varied pressures, chamades
1855
• St. George's Hall Liverpool - 4m Willis with GG compass, unequal temperament, archaic tonal scheme (S. S. Wesley)
1855
• 'The Organ' by Hopkins & Rimbault - first edition
1859
• Leeds Town Hall - 4m Gray & Davison designed by Smart with Barker action, crescendo, varied pressures, reeds and flues en chamade and enclosed (!) - their greatest triumph
1862
• International Exhibition London - organs by Willis (4m), Gray & Davison (3m), Walker (4m) and others
1862
• St. George Doncaster - 5m Schulze, Barker action, chromatic soundboards,

32’ manual chorus, voiced on site, diagonal bellows
1870
- death of William Hill

1871
- Royal Albert Hall, London - 4m Willis, 111 stops, 32’ tin front

1872
- St. Paul’s Cathedral, London - 4m Willis, divided, pneumatic link under floor. Began his fame.

1875
- Alexandra Palace, London - 4m Willis - his secular masterpiece, replacing an organ of 1873 destroyed by fire

1877
- Salisbury Cathedral - 4m Willis - his sacred masterpiece

1877
- St. Andrew’s Hall Glasgow - 4m Lewis with three swell boxes (influenced by Cavaille-Coll at Sheffield) - admired by Hans von Bulow

1885
- Inventions Exhibition, London - organs by Willis (4m), Michell & Thynne (4m, their masterpiece and only large organ, now at Tewkesbury) and others. Tubular pneumatic action, electro pneumatic action, and extension all on show somewhere

1885
- Canterbury Cathedral - 4m Willis with electro pneumatic action (but mechanical coupling)

1887
- St. John’s Birkenhead - 3m rebuilt by Hope Jones with electro-pneumatic key, stop and combination action, and couplers. Licences issued to various builders.

1889
- final version of Willis all-pneumatic action, patented by Vincent Willis

1890
- Sydney Town Hall (Australia) - 5m Hill with Arthur Hill case and full-length 64’ reed
- key action tubular pneumatic, couplers mechanical with Barker assistance.

1894
- Hope-Jones starts building new organs

1896
- Worcester Cathedral - 4m Hope-Jones with electro-pneumatic action and switchgear

1897
- Southwark Cathedral, London
- 4m Lewis, electro pneumatic action, the masterpiece of his Germanic style and the inspiration for the work of G. Donald Harrison.

1897
- St. Margaret’s Westminster, London
- large 3m Walker built for E. H. Lemare, establishes Walker’s new reputation in the front rank of builders.

1901
- Death of Henry (‘Father’) Willis
- family plunged into crisis

1901
- Thomas Lewis retires, company struggles on.

1903
- York Minster - 4m Walker rebuild (Walker’s first prestige Cathedral organ)

1904
- St. Nicholas, Whitehaven
- 3m Harrison & Harrison (to scheme by George Dixon), establishes Harrisons in the front rank.

1905
- Liverpool Cathedral - negotiations for 5m organ start with Henry Willis 2

1908
- Ely Cathedral - 4m Harrison & Harrison rebuild, establishes Harrisons as the country’s most fashionable builders, in preference to Willis.

1908
- Willis forced out of ‘Rotunda’ works in Camden Town, London

1911
- St. Mary Redcliffe, Bristol - 4m Harrison & Harrison, the most admired Harrison organ (there was more than one masterpiece!)

1912
- Liverpool Cathedral - 5m Willis
- construction begins under Henry Willis 2

1912
- Henry Willis 2 gradually replaced by Henry Willis 3

1914-18
- First World War

1916
- Johannesburg Town Hall
- 5m Norman & Beard - the last and greatest organ built at Norwich

1919
- Willis merges with Lewis

1922
- Westminster Cathedral - 4m Willis/Lewis started

1923
- Pavilion Theatre Shepherd’s Bush, London
- large Compton, part extended - establishes Compton in the front rank

1926
- Liverpool Cathedral - 5m Willis 148 stops opened (23 further stops never installed)

1931
- Downside Abbey
- large Compton derived from 30 ranks - his masterpiece

1932
- Westminster Cathedral - 4m Willis completed

1934
- King’s College Cambridge - 4m Harrison & Harrison rebuild
- the archetypal English accompanimental organ

1936
- Death of Arthur Harrison and end of the Harrison ‘era’

1937
- Downside Abbey - large Compton derived from 30 ranks of pipes, his masterpiece

1939-45
- Second World War

1952

- ‘The Organ’ by W. L. Sumner - first edition

1953

- Bromton Oratory, London - 3m Walker with Ralph Downes (the finest Downes organ)

1954

- Royal Festival Hall - 4m Harrison & Harrison with Ralph Downes
- Britain’s first large neo-classical organ (electro pneumatic action, no case)

1959

- Adlington Hall - Mander restoration of 17th century organ

1962

- Coventry Cathedral - 4m Harrison & Harrison, electro-pneumatic action, no case
- Cuthbert Harrison’s masterpiece

1963

- ‘The British Organ by Clutton & Niland - first edition

1965

- Queen’s College Oxford - 2m Frobenius - Britain’s most notable ‘strict’ neo-classical organ

1967

- Liverpool Metropolitan Cathedral, 4m Walker, electro-pneumatic action, no case

1967

- St. Albans - first International Organ Festival

1969

- New College Oxford
- 3m Grant, Degens & Bradbeer, mechanical action, encased
- the first important ‘strict’ neoclassical organ by a British builder

1972-7

- St. Paul’s Cathedral, London, 5m Mander rebuild, establishes Mander in the front rank

1976

- foundation of the British Institute of Organ Studies at Cambridge

1978

- Walker moves out of London under Robert Pennells

1985

- Our Lady of the Angels, Worcester MA
- 3m Walker, mechanical action, divided in three cases, trapezoidal soundboards

1986

- Lancing College - 4m Walker with some old Walker pipework, mixed action, magnificent case by David Graebe

1989

- St. Andrew, Holborn, London
- 2m Mander in strict 19th century style with Michael Gillingham

1991

- Grosvenor Chapel, Mayfair, London
- 2m Drake in 18th century English style
- the first neo-classical organ in Britain to be liked by most listeners!

1992

- St. Ignatius Loyola, New York City - 4m Mander with French symphonic leanings, case by Didier Grassin and Stephen Bicknell - the largest

mechanical action organ ever built in Britain