

THE STAGE

The stage is in proportion to the auditorium. Its size and complexity were outstanding for 1932 and we have one of these rare cases where the original planning provided adequate facilities to survive without significant modification for half a century.

The stage is 144ft wide by 66ft deep, with a proscenium opening of 100ft wide by 60ft high. The stage floor is divided into three 70ft long elevators which can sink to sub-basement level of minus 27ft or rise above the stage to plus 13ft. These elevators incorporate a 43ft revolve and when the elevators are interlocked, the revolve can turn simultaneously with ascent or descent of the elevators.

The orchestra pit contains another elevator which rises to stage level to form an apron. The orchestra play on a band wagon which can travel on either the pit or 1st or 3rd elevators. The wagon can move upstage or downstage in audience view or be repositioned while at basement level. For example, it may rise through the pit – travel upstage – ascend to +13ft on elevator 3 – then drop below stage – reposition on to the pit elevator – and reappear once again.

The elevators are powered by hydraulic pistons. As there are no sliders to fill the stage floor, gaps are left by sunken platforms. Therefore production use of the stage must be very carefully planned in terms of both scenic movements and artistes' safety. But scenery appearing and disappearing amidst a large dancing cast is the very stuff that spectacle is made of. (Incidentally the bandwagon is driven by an electrician who lies horizontal within the structure, inches from the floor. He requires a fine judgement: there are no brakes.)

CURTAINS

The House curtain, weighing 3 tons and renewed three times since opening night, is a 13-cable contour. The thirteen motors enable the curtain to assume any profile preset on the prompt corner mimic. The late great Brooks Atkinson of the New York Times reporting on the first night tells us 'The first number on the bill is entitled the *Symphony of Curtains* during which the great contour curtain folds and unfolds relentlessly across the proscenium'. With Rimsky Korsakov's 'Hymn to the Sun' and a full colour-mixing kit, it must surely have been one of the greater moments of the age of colour music – although Brooks Atkinson's use of the word *relentlessly* has perhaps something of a cautionary significance.

There are other curtain possibilities built into the structure – a rain curtain, complete with a rather unconvincing description of the use of a canvas trough in combination with a 5" elevator sinking. And there is a steam curtain fed from the very same supply that emerges from every Manhattan road surface. It is easy to accept the official line that

By the time that this article appears in CUE, the new Tours Department of Radio City Music Hall will be established. Extensive daily tours of the complex will be available and it will be possible to arrange specialist tours for groups with detailed interest in particular aspects of Music Hall's architecture and operation.

this device is always used at the very end of the finale so that the stage will not be too slippery for dancing. The flying system has 79 sets of single purchase – with weights somewhat more massive than average.

LIGHTING

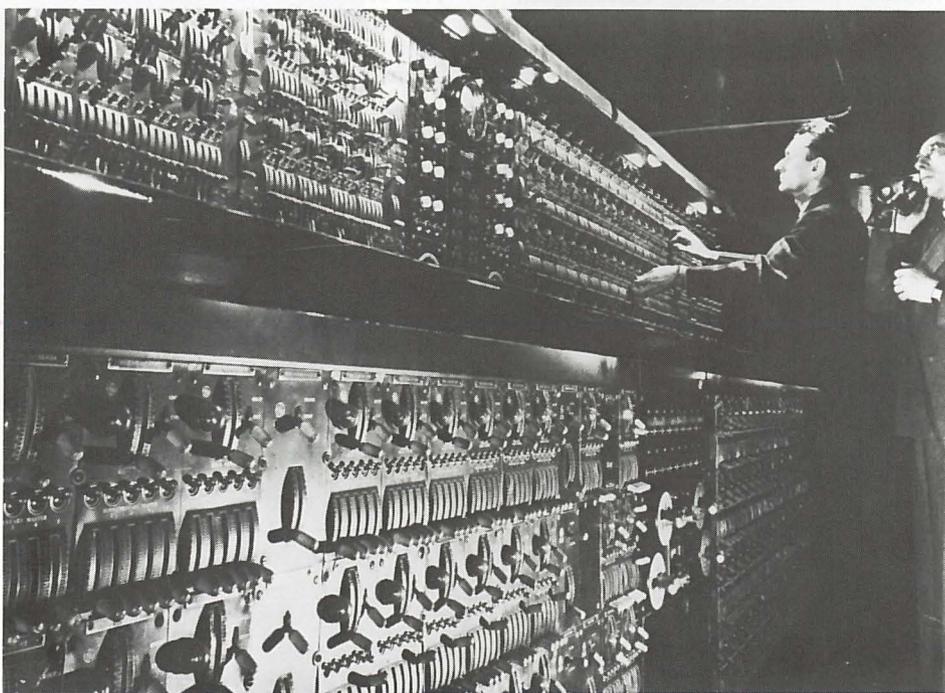
The jumbo dimensions of auditorium and stage create lighting problems. The enormous throws (190ft to the stage from the projection and follow-spot booths) require power beyond the capabilities of the tungsten lamp. This problem was solved in 1932 with 150 amp arcs. These original Kliegl spotlights are still in use but are now converted to 1200watt HMI sources. The main follow spot positions house a dozen such instruments with one operator to a pair (much of the operation is re-angling rather than complete following). There are a further half-dozen similarly adapted Kliegl arcs in a high mid-ceiling bridge position. These are

static but have one operator in attendance to strike up. The original selsyn-operated colour changers and blackout dowers still operate remotely from the lighting board. The lighting control is the original GEC system which was way ahead of its time when installed in 1932. Forty-eight years on and it is still running the show daily. *And*, although recent changes at Radio City have involved the importation of Broadway lighting design, it can still cope without the supplementary 'temporary' boards with which historic installations often have to be augmented. The system has 316 channels of thyatron-controlled saturable reactor dimmers. The console, situated in its own pit on the audience side of the orchestra pit, has one major ('rehearsal') preset and five subsidiary ('scene') presets. It should be emphasised that this was multi-presetting (level presetting, not grouping) and the date was 1932. There is talk of a memory board but let us hope that this original control will be allowed to complete its half century.

The 375-stop *Mighty Wurlitzer* organ has two consoles which slide from small curtained rooms in both proscenium walls. A visit to the organ's percussion loft is particularly mind-boggling . . . every conceivable percussion instrument including a Concert Grand Piano servo-linked to the Consoles.

SOUND

The auditorium shape has a good natural acoustic but the sheer size demands considerable reinforcement. Cine-variety demands a similar 'presence' to film sound to avoid a difficult aural transition for the audience. Much of the original sound equipment remained in service from 1932 until 1979. The sound desk is now located at the



The lighting control installed in 1932 is still running the show daily. (Herbert Gehr, Life Magazine © 1942 Time, Inc.)