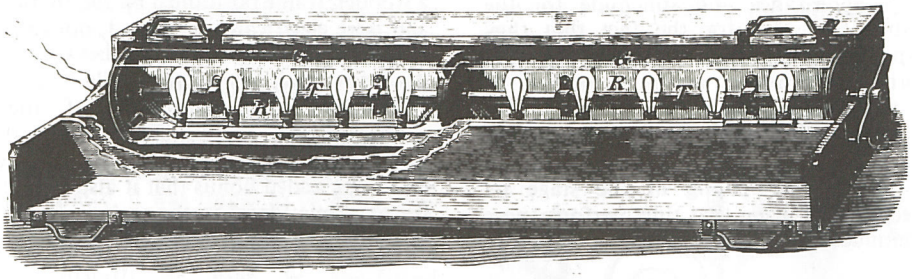

Fig. 6 Arrangement for coloured stage effect (T) iron tube (R) reflector (GG) coloured gelatine cylinder.

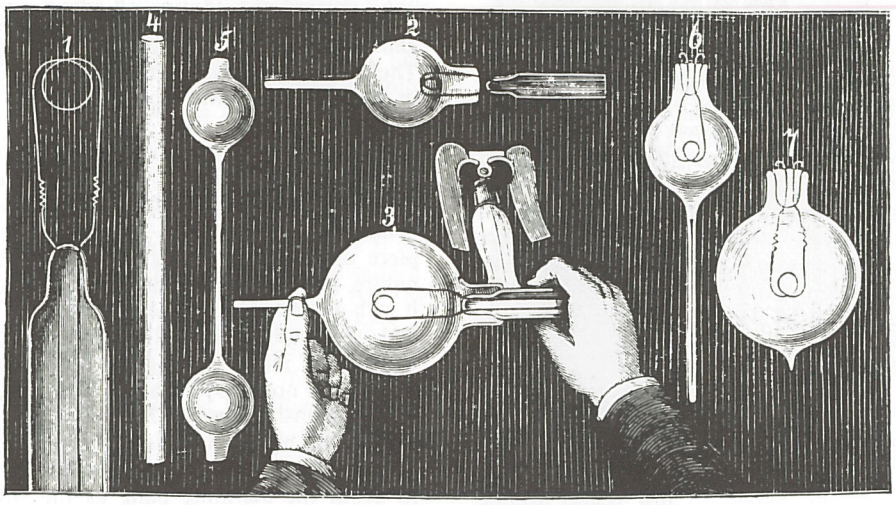

Fig. 7 Stages in manufacture of a Swan burner. Tube (4) is blown into two bulbs (5). The stem (1) is then inserted into two bulbs (2) and sealed (3). It is then placed on the air pump and exhausted (6) then sealed and finished off (7).

urged against the light of the electric arc can in no way be applied. in addition to this the light is absolutely steady, and thanks to the the enterprise of Mr. D'Oyly Carte, it is now possible for the first time in the history of the modern theatre to sit for a whole evening and enjoy a dramatic performance in a cool and pure atmosphere.

A Siemens publication (undated) tells us that

> Worthy of special mention was the three-colour lighting already employed [in a gas theatre]. In each of the trough-shaped units, the adjacent sockets were connected in three groups for the coloured lighting. In this way it was possible to bring in a red, a white and a blue or green coloured incandescent lamp alternatively into circuit.

The lamps themselves were coloured by dipping them into a mixture of photographers negative varnish and Judsons' dye, although this was unsatisfactory due to the temporary nature of the process, the shortening of the life of the lamp, and the inevitable loss of light, especially when blue dye was employed. A more common method, shown in fig 6, was to draw coloured medium of dyed gelatin or fabric round the body of the trough, which could be remotely controlled by tracker wires.

It can be read in reports of 1882 that the light emmited by the incandescent lamp even at maximum voltage had a warmer tone than gaslight, and that a very fiery orange could be obtained at medium voltage, and a definite red at low voltages.

> This richness in colour nuances of which this light is capable can be achieved at every instant, however, since the light can be regulated with the speed of lightning.

This statement is a fine example of how then—as now— enthusiasm for a new technology rated even the design faults and restrictions as positive virtues!

In all its trashy glory

However enthusiastic the public, press and technical people were, not everyone shared the euphoria. Ellen Terry, writing in her 'Memoirs' recalls

> We never had electricity installed at the Lyceum until Daly took the theatre. When I saw the effects on the faces of the electric footlights, I entreated Henry [Irving] to have gas restored, and he did. We used gas footlights and gas limes there until we left the theatre for good in 1902. To this, I attribute much of the beauty of our lighting. I say 'our' because this was a branch of Henry's work in which I was always his chief helper. Until electricity had been greatly developed, it could never be to the stage what gas was. The thick softness of gaslight with the lovely specks and motes in it, so like natural light, gave illusion to many a scene which is now revealed in all it's trashy glory.

Perhaps the key to Ellen Terry's pathological hatred of electric lighting—she even persuaded Irving to take three boxcars full of limelight equipment with him on his American tours as late as 1899—was the idea of 'light that dances, light that lives', still a laudable and much sought-after goal amongst modern lighting designers. Experienced people of the 'theatre of illusion' like Irving and Terry knew from instinct precisely what would 'read' on the