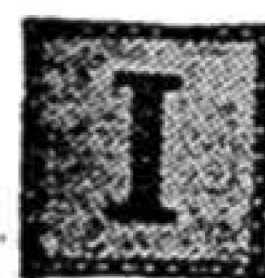


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Maude Adams invents Stage Lighting device

# MAUDE ADAMS INVENTS STAGE LIGHTING DEVICE

## Her Novel Theory of Stage Illumination Developed from a Hobby and Now for the First Time to be Put to Practical Use.



It has just been decided by the building authorities that the latest and greatest of Maude Adams's toys—a light bridge of unprecedented lighting capacity, costing thousands of dollars and weighing several tons—is practical and may be put to immediate use. The bridge will be employed for the first time in Miss Adams's new play, "The Jesters." It is a structure unique in the history of stage lighting. It is the invention of Maude Adams. Made of solid iron sheeting, the light bridge weighs over three tons, and has a lighting power equivalent to 8,000 candles. It represents seven years of experimenting, study, sacrifice of time, energy and money by Maude Adams in the working out of her theory of stage lighting. The new bridge arrived yesterday in a sixty-foot car from Boston. It took a good part of the day to suspend it above the proscenium arch of the Empire Theatre.

"Oh, I am glad," in the words of Peter Pan, said the little lady, to whom the granting of the full use of the new invention means so much.

"Very quietly among themselves, do you know what the theatre electricians call me? No?—why, light-headed."

Built in Boston by the Ericsson Company, and quietly shipped to New York, not a syllable about the light bridge has leaked out until this writing, lest the authorities, always jealous of their ipse dixit, should think their imprimatur has been robbed of half of its importance by losing all its news value.

It was almost midnight the other night when the writer stepped in at the stage entrance of the Empire Theatre for a privileged look at the new light bridge. There had been issued a call for a "light" rehearsal. The stage had been cleared. In the furthest corner, its windows looking like two eyes and its door like a mouth yawning at being kept up so late, was crouched "the house we built for Wendy." It was not set among the

tree tops nor did it reflect the dancing, fleeting lights of myriad fairies. But it was planted good and firm, utterly by itself, on a plain ordinary stage floor. Where was the Never Never Land, the Lost Boys, the "parrots," as one little chap called Captain Hook and his marauders? Gone, all gone were the evening's playthings. Here was the land of Make-believe, but all its denizens, from the epicurean crocodile to the most lamb-like of its little wolves, had trundled out into the world of reality.

Instead, there was a group of stage hands, electricians and heads of departments. Everything seemed in confusion; everybody tremendously excited. Some ran to and fro carrying all sorts of electrical instruments. Coats were off, shirt sleeves rolled up, and the air was charged with such words as "volts," "candle-power," "lenses," and the like.

Gradually the meaning of it all was conveyed. The municipal authorities had just decided that the latest device for stage lighting is practical and may be put to immediate use.

Several weeks ago this work of many minds, this huge contrivance, which gives promise of dividing in two the labor and multiplying by fifty the art of lighting stage scenes, had been put together in Boston. Pride was felt in it and great achievements expected of it by every electrician on Charles Frohman's staff. There was much excitement when, occupying a whole baggage car by itself, it arrived at the Empire Theatre. Then

the local authorities embargoed it; forbade its use, and cold water was thrown over the whole scheme. Enshrouded in secrecy until now the bridge had lain idle until two days ago. Then the authorities lifted the embargo.

High overhead hung the reason for the excited gathering. About two feet in width, the new light bridge is thirty-seven feet long. It is divided into seven compartments and in each compartment there is a great lens, capable of lighting any given space or corner of the stage with diffused, evenly rayed light, or with a concentrated spot light. In full operation seven men will operate its seven lenses like seven Gatling gunners at work behind the breastworks of a fort. It will do away entirely with border lights. It will make useless the old spot lights operated from the front of the theatre. Shadows—the bane of many an otherwise well lighted stage setting—it will eliminate. It may displace foot-lights. It may revolutionize the entire present scheme of stage lights.

One man, of considerable prominence, was in the gathering the other night, who knew intimately the history of this bridge for lights, its possibilities and its intricacies.

"Whose idea is this?" was a natural question.

"The whole thing really dates back to 'The Little Minister' and to an instance of Mr. Frohman's keen observation. Everybody in the cast was restless, especially Miss Adams, whom we called 'The Little Lady.' Nobody knew what the matter was. But without saying so Mr. Frohman discovered that it was the strain from acting 'The Little Minister' for three successive years. 'Lights,' thought Mr. Frohman—'She needs a hobby. I'll set her to playing at light effects; the very thing for adding a new interest to this third year in one play.' At once he gave carte blanche to the stage manager and to the little lady herself. Play and work are all one to her; she enters into the spirit of the one with a gusto that gives it the dignity of the other. If she knew the game she would play piquet with the same zest that she plays 'Peter Pan.' Always an enthusiast on stage lighting, she took Mr. Frohman's suggestion with delight and acted upon it as an opportunity long wished for. It was his wise device for easing the tension of another year in the same play. It was one of those thoughts which, begun in play, end in earnest reality. Over our heads hangs the earnest

reality. With her cohort of stage managers and electricians, the little lady began at once to improve the night scene of the first act in 'The Little Minister.' It had never been quite satisfactory. From the lights above came the chill, dank, half-light of an April night; but the footlights at the same time suggested broad daylight. This fixed the blame on the footlights and first made her wish them out of the theatre.

"Then a particular light impression was needed for the scene in the woods. It could not be got by using the white bulbs in the footlights. And at that time there was not the great number of finely differentiated colored lights we now have to choose from. Something had to be done to soften the pallor of the footlights. Several of us lent a hand to the experiment—'dimming' the lights, decreasing their number, but without getting the right effect. I came back to the theatre after a matinee one afternoon for an hour's work at the thing myself. But somebody had got ahead of me. The footlights were turned on so that they lighted up a serio-comic figure, working along from place to place, putting something on each bulb

"'Ah! ha!' the lonely figure cried out to me. 'I've found it,' and held up a bottle.

"I recognized it as my old friend, 'The Bloom of Youth,' friend of my bosom, I might say, a famous decoration for the faces of actresses and hence the coats of actors. There was Miss Adams administering 'The Bloom of Youth' to the footlights. And it gave exactly the color tone they needed. Thus, partly by study and observation, partly by accident, Miss Adams went on and on, from one discovery to another, in stage lighting.

"How do you mean by 'accident?'"

"Well, one night during a performance of 'L'Algon,' the footlights suddenly went out in the field of Wagram scene. Everybody was upset by the accident, and ready with explanations or sympathy. But neither was needed. Miss Adams was delighted at the mishap. 'Everything that happens helps!' was her exclamation. With the footlights extinguished, and only lighted from above, she found herself more closely taken into the scene and the illusion splendidly heightened. Free of the piercing, distorting lights from below, 'L'Algon' felt himself actually on the field of Wagram.

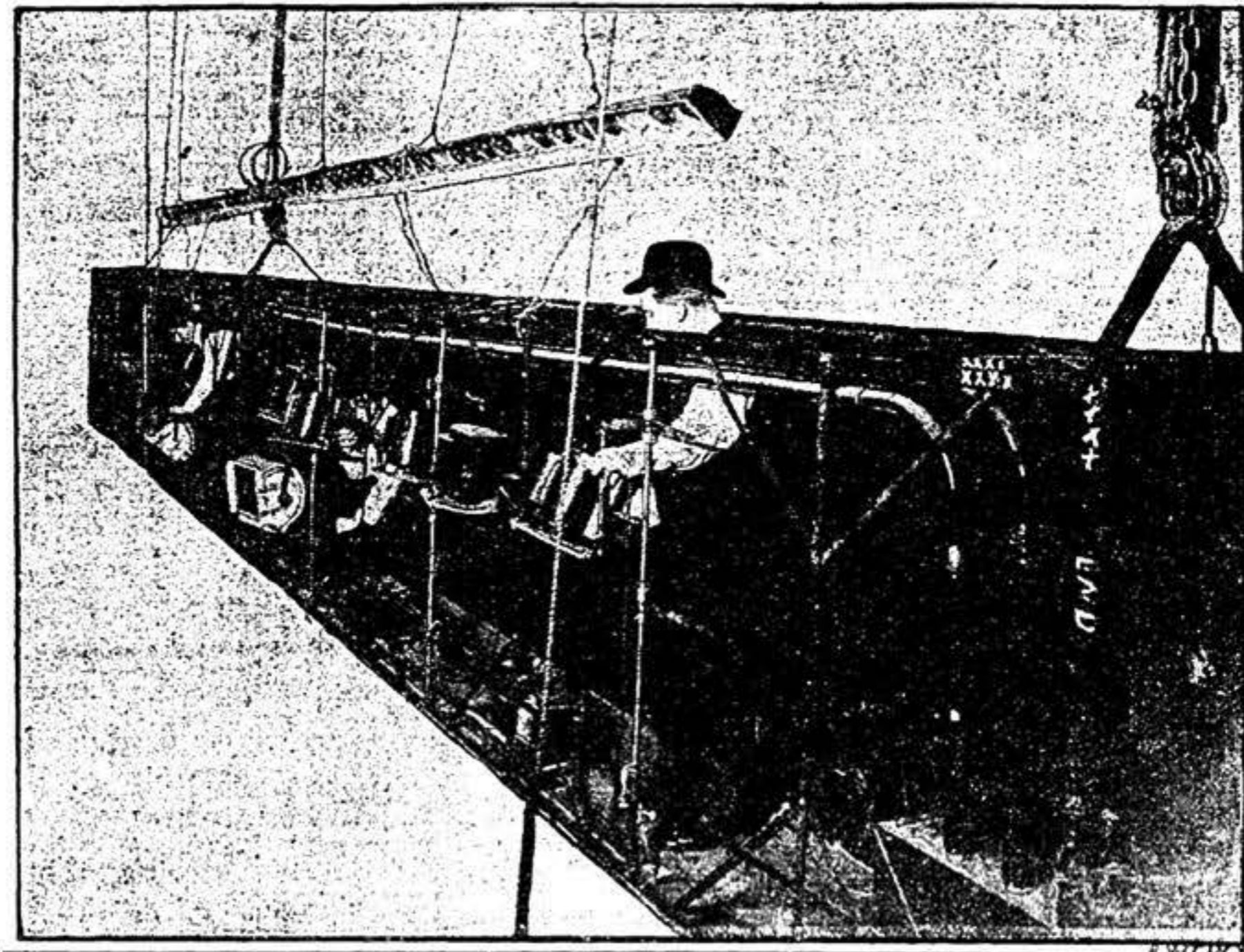
"The tendency of these experiences was to persuade Miss Adams that footlights, as at present used in the theatre, are an impediment rather than a help. Nothing had as yet suggested itself in place of footlights. But the problem had reduced itself to the question of counter-acting the force of the footlights. It must be a powerful sun-like light from above, Miss Adams knew. She saw proof of this at The Comedie Francaise one night when, lighted only by the great chandelier from above, the faces of Mounet Sully and the company grouped behind him for a curtain call, were illumined in a finer manner than when all the border lights and footlights were in full operation.

"It was a fine illustration of the effect she desired. An arc light would not give it, for the light must be diffused, evenly rayed, not concentrated. Nor would a calcium, with its sputtering and variable-ness of flame, answer any better. But every now and then progress was reported to Mr. Frohman. Neither England, France nor Germany contributed anything to the subject. As it is in Boston that the bridge has been finally perfected, so it was in Boston that the first rude

steps were taken toward thinking it out. To strengthen the lights above and diffuse their rays they were removed from the borders and set by clusters inside dishpans.

"They were a great joke for a long time—those dishpans. But it seems that, out of little dishpans grow great light bridges. To Miss Adams herself the whole experience has been a joyous adventure. Its work has been fun; its delays added incentives; its final achievement, always a certainty.

The new bridge, it is believed, is the longest step yet taken toward the end so many are striving for—lighting the stage, not theatrically, but as nature lights her landscapes. It will be used principally in cycloramic scenes, as in the new third act of 'Peter Pan'—to enhance the sense of distance. The trouble with present stage lighting is that it is still artificial; true to the conventionalities of the stage, but not true to nature. Nature lights the scene of her great stage from one concentrated source. "Up to now," it was explained, "we have been lighting the scenes of our little stages from many points—from the footlights, from the wings of the stage, by spotlights in front, or by five or six border strips above the scene. Yet we get low lights where we should get high lights; great shadows where we should get diffused lights; and rarely, if ever, even with the combined art of a scene painter and the electrician, do we produce a sense of the mystery of limitless space. These are some of the faults which it is expected will be corrected by the new light bridge."



The chief value of the light bridge is the substitution of a new, steady light in place of the usual carbons. These especially prepared incandescent lights on the bridge will eliminate the sparks and flickerings of the old lights.

The light bridge has connections from either end. Its seven dirigible baby spot lights and especially constructed bunch lights make up an improved form of stage lighting, because of the steadiness and immense power to be had from them.

An operator stands in this manner at each bunch light (there are seven) and, with all border lights, footlights, and striplights extinguished, the stage is flooded with a powerful and steady light from the bridge alone.