

**THE FIFTH INTERNATIONAL AUTOMOBILE CUP RACE.**

The fifth time that the trophy presented by Mr. James Gordon Bennett has been raced for, was on June 17 last, when a 341½-mile race over an 85.38-mile course was run off in Germany. As a result of this year's contest, France once more holds the cup, for the race was won this year by the Richard-Brazier machine, which obtained first place on the French team in the eliminating trials. Driven in both events by M. Théry, this car has obtained a reputation for steady running that can hardly be surpassed. It is of only 84 horse-power, while that of most of the other racers was in the vicinity of 100; yet by its steadiness of running and freedom from breakdowns, it won the race, traveling at an average speed of 58.2 miles an hour. In the French eliminating trials it made an average speed of 61½ miles an hour. The two German Mercedes cars, driven by M. Jenatzy and Baron de Caters respectively, took second and third place. After the race these gentlemen claimed that it was the time taken in replenishing with fuel that lost the race for Germany, for the 90 horse-power Mercedes cars ran as regularly as usual.

There were no serious accidents during the race. Jenatzy nearly ran into a locomotive, which at one point stopped across the road, barring his passage; but fortunately he was warned in time. Herr Opel, on his Opel-Darracq (the third car on the German team) broke his rear axle while going fast, but escaped uninjured. Edge had a great deal of tire trouble with his English Napier; and Jarrott, on an English Wolseley car, had every conceivable kind of a breakdown. Besides England, France, and Germany, Austria, Belgium, and Italy were represented by three cars each. Various troubles put all of these cars behind or out of the race.

This greatest of all automobilism events for 1904 was started in the presence of the German Emperor at 7 A. M., and was completed in the afternoon, the time of the winner being 5 hours, 50 minutes, 3 seconds. Jenatzy, who won the cup last year, was beaten by 11 minutes and 18 seconds, while his companion, De Caters, was beaten by nearly an hour.

Following is a description of the winning Richard-Brazier car: The engine is a four-cylinder vertical one placed, as usual, in front, and covered with a square bonnet having radiator and fan in front. No water-circulating pump is used, the circulation being kept up on the thermo-siphon principle. The engine is fitted with high-tension ignition by magneto, and its inlet valves are mechanically operated. The car is fitted with a chain drive to the rear wheels, and has a three-speed transmission. Its wheel base and track are 2 meters 60 millimeters (6 feet 9½ inches ap-

proximately) and 1 meter 25 millimeters (3 feet 4 inches) respectively. The front wheels are 810 millimeters (32 inches) in diameter and the rear ones are 820 millimeters (32½ inches). The car weighs complete 972 kilogrammes (2,142.87 pounds).

**TEST OF FIREPROOF STAGE PROPERTIES IN LONDON.**

Ever since the terrible disaster which took place re-

and costumes of his theatre—the Alhambra. Records of loss of life and property due to fires in places of amusement, show that in the majority of cases the trouble has started among some of the highly inflammable material that has been employed on the stage, the recent appalling disaster at Chicago being a case in point. Any measure, therefore, which will tend to guard against the possibility of a repetition of the Chicago disaster, and which removes the danger

from an outbreak of fire in the most susceptible portion of a theatre or other place of amusement, is one which strongly commends itself to the attention of the public authorities, who are just now diligently seeking to discover some way or means of preventing fires in such places.

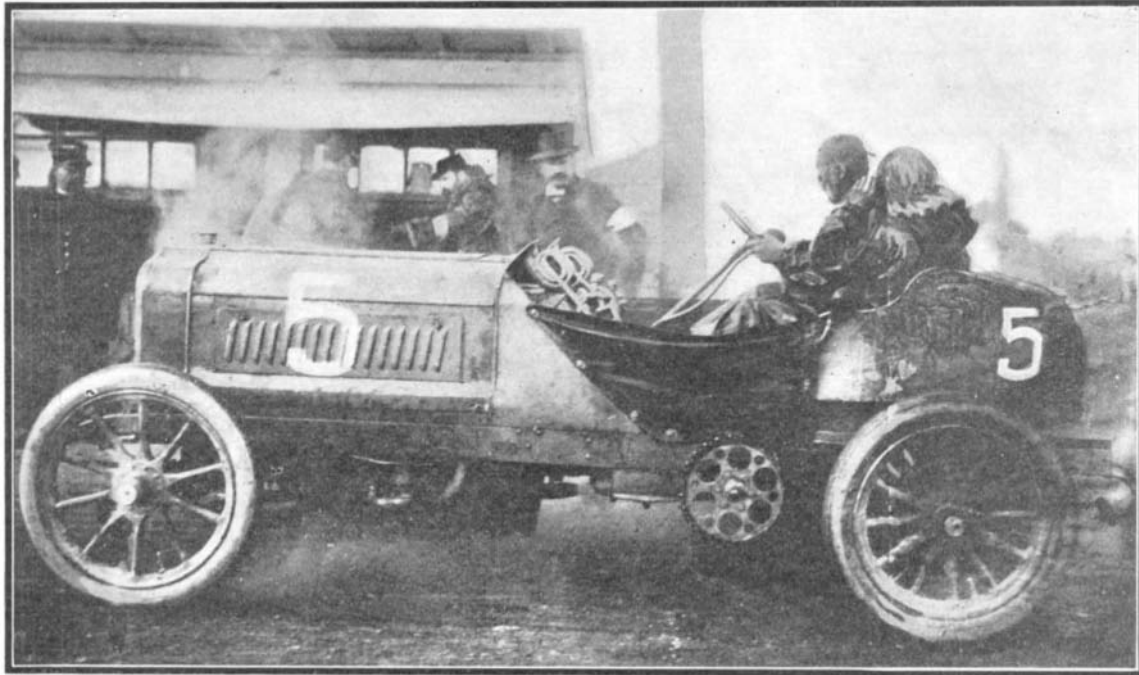
Several months ago a private exhibition of the fire-resisting qualities of the material used in the scenery and production of a popular ballet was given in the Alhambra Theatre, the experiments demonstrating the possibility of rendering the stage and its accessories absolutely proof against fire, even in the case of the flimsiest gauzes and the most delicate silks. Some of the costumes had been treated before being made up, and proved non-inflammable

even when tested by the intense heat of a flaring gas burner and an electric arc.

The curtain, when drawn up before a large gathering who had been invited to witness the test, showed the stage area littered with "properties," from ordinary table and chairs to plants, pedestals, fragments of a sylvan wing, and a portion of a vine-clad veranda. Near the footlights, and parallel with them, a gas-pipe, with a dozen flaring jets, lay supported by a pair of trestles. A number of men occupied the stage, among whom were firemen, standing close to buckets of water.

The process of imparting the quality of non-inflammability took place with the raw material, so that the details in a stage bouquet had been treated before being made up into the finished article.

A merely superficial application of fire-resisting solution was demonstrated to be little better than useless. The solution must be forced into every pore and fiber. Ordinary canvas applied to one of the gas jets speedily flamed, but similar canvas which had been treated with the solution employed, was held in the flames of four or five burners without more than carbonizing. The same result was obtained with linen, with argentine, with light gauzes. In the case of a sable-hued gossamer gauze, the flaming was so swift with the untreated articles, that the attendant fireman had barely time to plunge it into his bucket of water. With the corresponding article treated, a red-edged smoldering could be seen, but no flame.

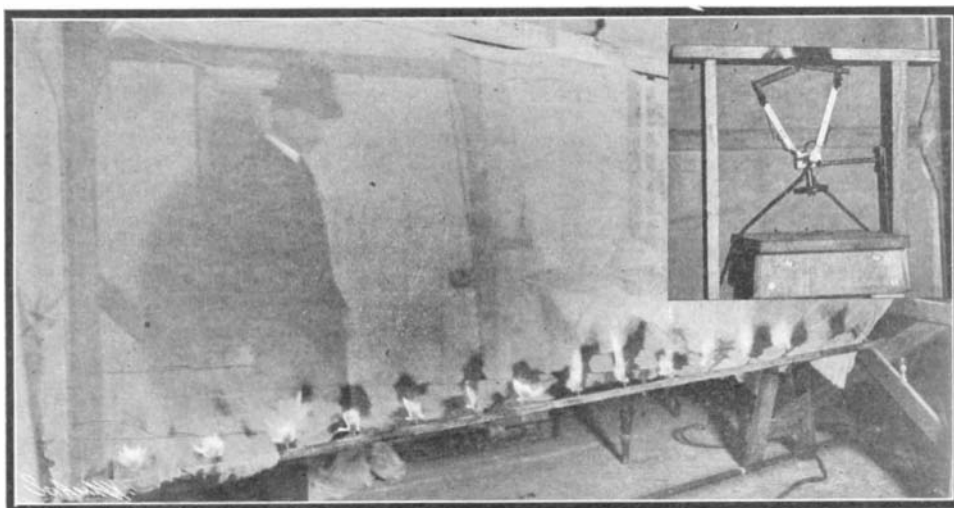


**THE RICHARD-BRAZIER CAR IN WHICH M. THERY WON THE INTERNATIONAL CUP.**

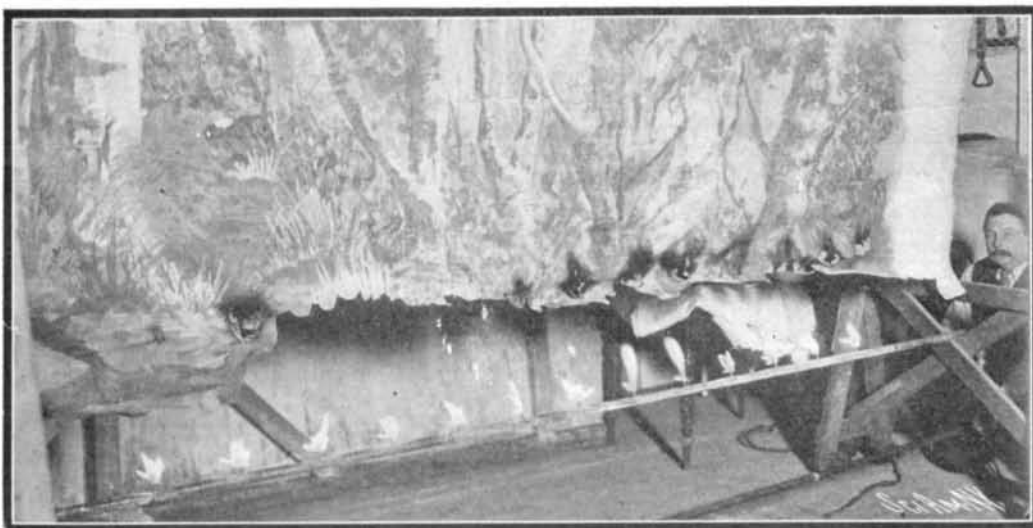
cently at the Iroquois Théâtre in Chicago, when hundreds of lives were lost as a result of the fire which originated on the stage of the theatre, experiments have been made in almost every city of the United States, and even in Europe, with a view to rendering theatrical fabrics and scenery absolutely non-inflammable.

The subject has claimed the attention of managers everywhere, striving to secure some process that would render perfectly non-inflammable all the properties pertaining to the stage, rendering impossible a repetition of the Chicago disaster, or that there should be any fear in the minds of theatre-goers that so awful a catastrophe could happen again.

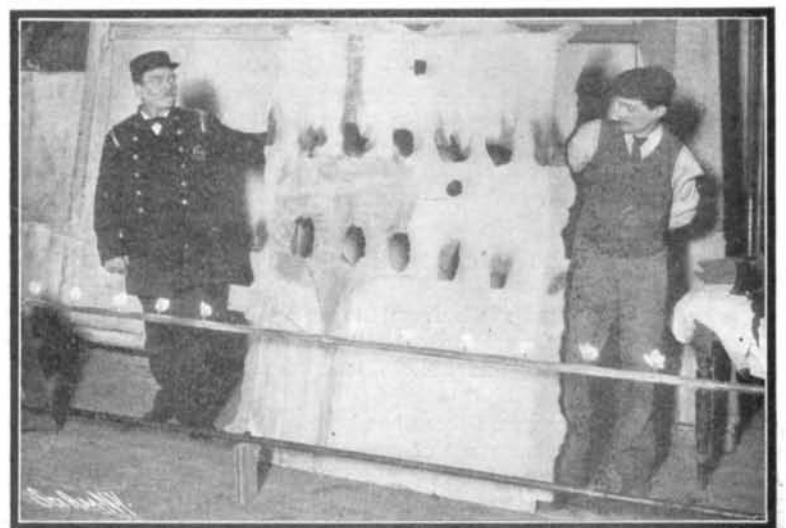
A London manager seems to have attained a fair measure of success in fireproofing the stage properties



**Subjecting a Piece of Gauze to a Ten Minute Flame Test.**



**Drop Scenery After a Test, Showing Purely Local Effect of the Flame.**



**After an Hour's Contact with the Flames.**