Scientific American.

A COURTHOUSE GOING TO COURT.

The citizens of Boxbutte County in the State of Nebraska recently took a vote upon the question of moving the county seat from Hemingford, where it was then located, to Alliance. Both of these towns are, of course, in the county of Boxbutte, and the circumstances which rendered the move desirable were cer-

tain changes of population, etc., which rendered Alliance the more desirable location. But while a change of location was desirable there was no necessity for a change of courthouse, as the existing building at Hemingford contained ample accommodations for the business of the county; moreover, the distance from Hemingford to Alliance was only 19 miles, and the level country between the two was singularly propitious for a feat of house moving.

Accordingly a contract was let to a "house mover" at Lincoln, Nebraska, who, however, after jacking the building up and getting it on its trucks, found that his hauling machinery was not equal to the task, and canceled his contract. The citizens were thus again confronted with the alternative of voting \$30,000 bonds for the construction of a new courthouse or making a further effort to move the old building. It is probable

that the structure would have stayed in Hemingford but for the fact that the Burlington and Missouri Railroad runs through the county, and being a heavy tax-payer would have had to bear in the taxes levied the major portion of the cost of a new house. The company conceived the bold and certainly original idea of acting as a common carrier for the courthouse itself, and transporting it as so much freight over the 19 miles of track between the two towns in question. Accordingly the building, which measured 38 by 50 feet and towered 51 feet above the rails, was placed upon four 60,000-pound capacity trucks, heavy bridge timbers being interposed between the bottom sills of the building and the trucks to secure an even bearing and properly distribute the load.

Now as the width between rails is only 4 feet 81/2 inches and the building was 38 feet wide, it was necessary to steady the structure to prevent it from rolling into the ditch. This was ingeniously done by placing two loaded 60,000-pound coal cars immediately in front and behind the building and guving it with ropes as shown in our illustration, which shows the strange procession under way.

The trip was made without any mishap at a speed which varied from 5 to 8 miles an hour, according to the grades. The only obstacles encountered were some small cuts which had to be reduced to allow the floor of the building to clear them. We are informed by Mr. J. R. Phelan, the superintendent of the road, to whom we are indebted for our particulars, that the building is larger than it appears to be in the picture—the apper story in which the courtroom is located having a 16-foot ceiling. It was aptly remarked by a spectator as the strange

procession rolled by that this was "the first time that he ever saw a courthouse going to court."

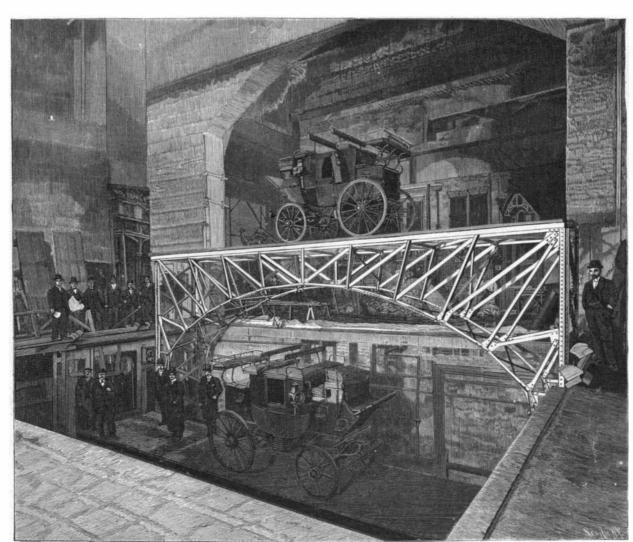
MODERN STAGE MECHANISM.

The movement known by the name of "stage reform" has of late years received considerable attention in England and has awakened interest at least in the



A COURTHOUSE GOING TO COURT.

United States. It originated some twenty years ago in Austria with the primary object of encouraging the greatest possible imitation of nature in the mise-enscene. The rudiments of art as understood by painters, sculptors, and architects were to be applied to the stage and true scenic art was to take the place of the nondescript mounting of plays. It was also considered essential to introduce modern methods of stage mechanism, lighting, etc., and special attention was to be paid to protection against fire, for the movement originated in Austria after the terrible "Ring" Theater fire in Vienna, and since this time the movement has not only surely and gradually developed throughout Austria and Germany, but also spread beyond the



ELECTRICALLY OPERATED BRIDGE, DRURY LANE THEATER, LONDON.

frontiers of those countries. The old methods of changing scenes and producing effects which have been in use for a hundred years have been done away with, and the mechanical engineer and the architect have been set to work to revolutionize stage mechanism. The most untiring worker in England is undoubtedly Mr. Edwin O. Sachs, who is the recognized authority

on the subject, and our engraving represents a most useful improvement in manipulating the "bridge" of a modern theater stage which he designed. Hydraulic stages are in use in quite a number of places in the world and we have one in this country, but this method of manipulating stages does not appear to have met with very much approval either in England or in America.

To those who are not familiar with stage construction, it may be said that a first-class stage consists of a number of sections termed "bridges" which are 30 or 40 feet long and 8 feet wide. These "bridges" can be raised or depressed to make mountains or caves as the case may be, and in fact, the uses to which they can be put are almost legion. There are usually five or six of these "bridges" separated by narrow flaps. The first theater to do away with the creaking old wooden drums and

pulleys of two hundred years standing, worked by manual labor, and substituting electrical power instead, is the Theater Royal, Drury Lane, London, England.

Mr. Sachs divided the main stage into six sections, which are arranged to be moved vertically either 12 feet above the stage level or 8 feet below it, while the fifth and sixth sections were to be built to be moved vertically only, being the most distant from the audience and only to move as a whole; the third and fourth were also to move in a sloping direction, while the first and second sections, besides allowing for a sloping movement, were also to be cut up into moving subsections for traps and the like. For the third and fourth sections hydraulic bridges were used. The fifth

and sixth sections were built according to Mr. Sachs' plan and in time the others will also be reconstructed. The bridges are 40 feet long by 6 feet 9 inches wide and an 8-inch flap intervenes between them. The two sections which are worked by electric power embody a new principle for stage mechanism, namely, the principle of the suspended lift partially counterweighted frame taking the form of a bridge, so that what is known technically as a "bridge" on the stage literally becomes a laticework bridge from the engineer's point of view.

The lattice and girders are 38 feet 10 inches long, 5 feet 6 inches wide. They are well braced together as shown in our engraving and form a rigid structure on the top of which is the floor forming a part of the stage. The steel portion of each lift weighs a little more than 434 tons and the platform 1½ tons more, so that the total weight is not far from 6 tons. About two-thirds of this weight is taken off from