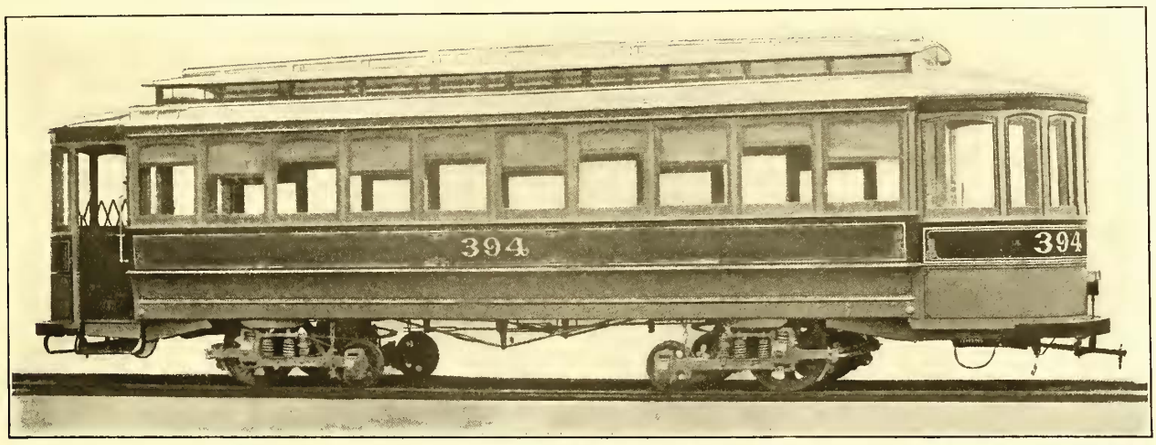
NEW CARS FOR COLUMBUS, OHIO

The Columbus Railway Company has just put in service twenty closed cars of the type illustrated herewith. They were built by the J. G. Brill Company, of Philadelphia, and are just like ten other cars which the same company built for Columbus two years ago, and which have proved very popular.

The length over end panels is 28 ft. 8½ ins.; over vestibules, 38 ft. 7 ins.; width over sill plates, 6 ft. 11 ins.; over belt-rails, 7 ft. 11¼ ins. The platforms are 4 ft. 6 ins. from end-panels to wainscoting of vestibules. The vestibules are sheathed with sheet steel, and are protected with patented angle-iron bumpers. Patented folding gates are provided at the entries. The slide sills have ½-in. x 7-in. steel plates, and the platform supports are reinforced with heavy plates. The seats are longitudinal. The interiors are finished in cherry, with ceilings of bird's-eye maple. The cars are mounted on "Eureka" maximum-traction trucks.

The car carries a novelty on its roof in the form of a braced trolley board. The usual plank is trussed by two straight steel rods, which bring all the weight and strain of the pole at the ends of the car instead of on the entire deck, as is the usual practice.



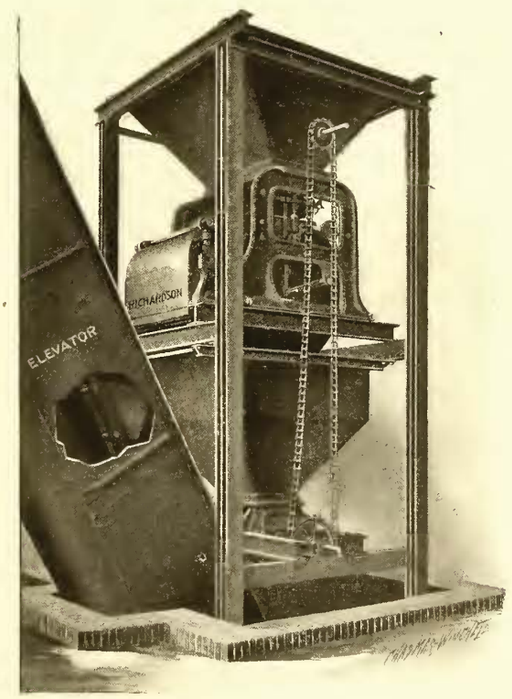
ONE OF THE NEW CARS FOR COLUMBUS

AUTOMATIC SCALES FOR POWER PLANTS

The accompanying cut illustrates an automatic scale in use in a large power station at Bristol, England, where it serves to check the coal as it enters the plant. These scales are also frequently used to weigh and register the coal as it goes to the automatic stokers.

The material to be weighed is supplied from a hopper or bin above the scales and is admitted into the weigh-hopper by means of a swinging cut-off which, at the beginning of the operation, is open. When the charge is nearly completed the cut-off, actuated by the increased weight of the weigh-hopper, partially closes and reduces the stream of material to a mere dribble. When an exact balance is reached the cut-off completely closes, stopping the flow, and in doing so throws up a lever, which sets in motion the mechanism which opens the bottom of the hopper, and as soon as the charge has been dumped closes and locks it again. In closing the bottom of the hopper the dumping mechanism again strikes the lever, throwing it down and thereby causing the cut-off to open and allow a new charge to flow into the weigh-hopper. The movement is a very simple one, the only power required being the momentum of the falling material. It is claimed that an absolute balance is secured of every weighing. A long-armed beam is employed, swinging entirely free of any of the working parts of the machine, thus insuring frictionless movement. The weigh-hopper and closed weight-box are entirely free from the guides or stay-rods, and consequently no rocking of the hopper takes place during the discharge of the machine to cause friction and unnecessary wear on the knife edges and invalidate the accuracy of the weighings.

The scales occupy less room in height than any other machines of similar capacities. The machines are adapted to the weighing of many different materials and are made in many sizes, with hopper capacities running as high as 6 tons, and they have been found especially accurate in the weighing of materials in large charges.



AUTOMATIC SCALES FOR WEIGHING COAL

The scales are put on the American market by the Richardson Scale Company, of New York.

A general shortening of schedules on the lines of the Metropolitan Street Railway Company, of Kansas City, Mo., has been made possible because of the new policy adopted by the company of inducing passengers to step lively and of taking on only such passengers as are at the designated stopping places.