MODERN ART entered the field of rail car construction on Union Pacific's new train. The exterior is an unusual blending of golden brown and canary yellow separated by a narrow red stripe which extends the entire length of the train and accentuates the stream-lined effect. The interior is striking in its simplicity. The color scheme is blue, shading down from a nearly white ceiling, through the lighter shades of blue to a dark blue below the window sills. There are horizontal bands of polished aluminum showing between the different shades of blue. Window sills are black bakelite. The chairs are trimmed in aluminum and the seats are upholstered in a golden brown tapestry. The floor has a harmoniously colored aisle strip. Window shades are a Venetian blind design and curtain rollers are entirely concealed. The simplicity of the entire decorative scheme creates a pleasing atmosphere of restful beauty.

A second train, incorporating sleeping cars, is under construction.

Western travelers of tomorrow will enjoy comforts and conveniences heretofore unknown—the result of innovations in design and construction introduced by Union Pacific in its new high-speed, light-weight, stream-lined train. The train is fully air-conditioned, thus eliminating all draught and dirt. The seats for 116 passengers in the two coaches of the train were especially designed for this equipment. A novel device makes it possible to install individual tables at each seat for service of meals from the buffet or for use as a writing desk. Meals, prepared in the unique buffet kitchen, will be served from special combination tea-cart steam table by waiters who pass through the aisles. Windows, all of shatter-proof glass, were manufactured under a special formula to take the glare out of sunlight. An indirect lighting system insures uniform light without shadows. Comfort, convenience and beauty of design are apparent in every feature of the entire train. Every effort has been made in its building to provide travel pleasure in Union Pacific's new train.

The Buffet — in Rear of Last Car.
SUPER SPEED—WITH SAFETY—AND COMFORT

Speed with comfort, safety and economy of operating costs were the aims in the construction of Union Pacific's new train. Because of its radical departure from the conventional type of car and train construction, exhaustive tests were conducted during the development of every feature of the train to insure its perfection. Slightly more than 204 feet in length, from rounded nose to its fin-like tail, the total weight of the three-car unit is equal only to that of a single modern steel Pullman car. The light weight was obtained by the use of aluminum alloy which has one-third the weight of steel, with the same strength. The tubular structural design was perfected to give additional strength. The smooth, stream-lined exterior of the train, with even the vestibule steps drawn up into the cars while the train is in motion, provides sufficient power economy to enable a 600 horse power distillate-burning motor, directly connected to a generator, to provide power to propel the train at a maximum speed of 110 miles per hour. The super-brakes are of a new design—a dual system, each coordinated part of which is capable of safe operation in event of failure of the other. A duplicate device is installed to require the engineer to keep either foot or hand constantly on a control. Releasing pressure of hand or foot automatically closes the throttle and applies the brakes. A newly developed appliance called a "decelerometer" has been perfected and is installed on the train. Its function is to equalize brake pressure on every wheel, admit maximum pressure but prevent locked wheels. The braking system is such that the train cannot be started unless the brakes are in perfect working condition. Articulation between the cars of the train was adopted as best suited for smooth riding at high speeds. In articulation, the cars are hinged together with only one truck between each two cars. The train is fully equipped with roller bearings and trucks are designed to incorporate the use of rubber to the fullest extent for the elimination of noise and to improve riding quality. The train is operated from a cab situated above and in front of the engine compartment. An instrument board before the engineer shows conditions of every part of his power plant at all times. There are air, oil, water, fuel, electric gauges and a speedometer. He has an unobstructed view ahead and on both sides of him. Electric signals afford communication between him and the train crew. A powerful fog-piercing headlight is supplemented by a light which throws a ten-inch vertical beam, for added safety. Warning signals are given by a powerful siren and an electric gong. The diagram below shows the plan of the new 3-car train, the location of its various features from engine room, mail and baggage compartments of the first car to buffet kitchen in the end car. The new train is Union Pacific's answer to the desire of today for greater speed, with safety, and comfort.

As a color for the exterior of the new train, canary yellow was selected after exhaustive tests. It was chosen as an additional safety measure. Canary yellow can be seen for a greater distance than any other color and its blended combination with golden brown trim constitutes one of the outstanding features of the train.