

① Striped Boiler Gage to Prevent Explosion

MANY a boiler explosion has resulted from the fact that the fireman believed his boiler gage glass was full when in fact it was empty. To prevent this hazard there has been perfected a striped background for gage glasses that reveals at a glance whether the boilers are full or empty.



The lines as seen through the water in the glass are at right angles to those of the background, and the lines through the empty section of the glass are approximately at the same angle as those on the background.

The scheme was first developed for use in the Edison Lamp Works at Newark, N. J., where the interior of the fireroom is white.

New Camera "Gun" Serves as Important Weapon

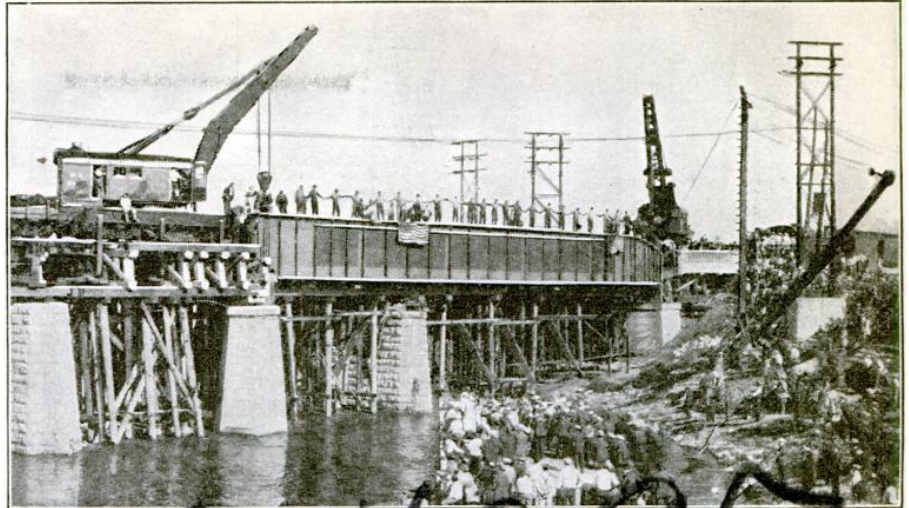


THE camera gun for photographing both movies and stills has attained a military dignity nearly equal to that of the most powerful war weapons. Both kinds of photographs are used extensively in determining the effect of smoke screens, shell fire, and aerial bombs, and for estimating the velocity of projectiles.

Chief photographer J. M. Hayme, of the U. S. S. Wright, is shown above with his odd looking navy model K-1 aerial camera, taking "movies" from a torpedo plane. This remarkable camera has a special 24-inch lens.

THE Editor will be glad to supply, wherever possible, the names and addresses of manufacturers of devices mentioned in this issue of POPULAR SCIENCE MONTHLY.

THE WORLD'S LARGEST BRIDGE GIRDER



WHILE motion-picture cameras clicked and hundreds of spectators cheered, the longest and heaviest steel bridge girder in the world was laid re-

cently as part of a railroad bridge at Rock Island on the Mississippi. This giant girder weighs 97 tons and is 114 feet long. Two powerful cranes lifted it.

① EUROPE BUILDING MOLDED HOUSES

BESET by a shortage of material and labor, Europe today is experimenting with an inexpensive method of building houses by molding them of a cheap mixture of gravel, sand, and slag with a small proportion of cement. This mixture is said to equal masonry in durability, heat insulation, freedom from cracks, adherence of plaster, and nailing qualities. It is cast in molds made of sections that are fitted together in a few hours. The

windows and doors are cast with the walls. It is claimed that these molds can be used at least 30 times.



A molded house nearing completion. Note the roof construction

MOTOR SPEEDWAY ON FACTORY ROOF

HIGH above surrounding roofs of Turin, Italy, has been constructed the most remarkable motor speedway in the world—a three-quarter mile track, 70 feet wide, with steep banked turns around which high-powered cars, stripped to their skeletons, dash every day at the greatest speed their roaring engines can produce.

The track is used for testing the cars of a well-known Italian automobile manufacturing company. Each chassis, when assembled is taken to the roof by elevator and driven around the track at top speed until the staff engineer conducting the test is satisfied with its performance.

The track is of armored concrete with a top dressing of asphalt. It consists of two long stretches and banked turns. Concrete walls five and ten feet high act as safeguards.



The three-quarter-mile speedway on the roof of an automobile factory at Turin, Italy, and, above, one of the high banked turns

