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COVER

A special derrick, installed aboard a 300-ft. barge, lifted a world's record weight in a single load of 800 tons in a recent test in the Gulf of Mexico. It was provided by the American Hoist & Derrick Co. for J. Ray McDermott & Co., A.G.C., marine contractors of Harvey, La., to meet special problems in constructing drilling platforms in the Gulf. The barge required 2,000 tons of steel and 40 tons of welding rod, and was built by Avondale Marine Ways, New Orleans.

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COVER

This giant "cat cracker" will catalytically convert daily 102,000 barrels of heavy crude oil into gasoline and other products for further processing. The orthoflow fluid unit is part of the Tide Water Associated Oil Company's new 130,000-barrel-per-day Delaware Flying -A- Refinery being built 15 miles south of Wilmington. When finished later this year the unit will be 250-feet high, taller than the towering guy derricks on the cover. The prime contractor on the job is C. F. Braun & Co., A.G.C. contractor of Alhambra, Calif.

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COVER

Frank J. Rooney, right, Frank J. Rooney, Inc., Miami, receives gavel denoting the 1956 presidency of The Associated General Contractors of America from 1955 President George C. Koss, Koss Construction Co., Des Moines, Iowa. Mr. Rooney is a prominent building contractor, while Mr. Koss heads one of the nation's largest paving firms. (Photographs of the 37th annual A.G.C. convention in this issue are by United Press Associations.)

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COVER

This is a close-up view of the bolts and steel plates used to fasten the precast cement panels to the supporting columns of the new chapel on the island of Guam. Concrete louvers can be seen running the length of the building, breaking up the otherwise severely-peaked roof line. An illustrated story on pages 65-66 describes the unusual construction methods used by Brown-Pacific-Maxon Co., an organization made up of the following A.G.C. firms: Brown & Root, Inc., Houston; Pacific Bridge Co., San Francisco; Maxon Construction Co., Inc., Dayton; Swinerton & Walberg Co., San Francisco; Utah Construction Co., San Francisco. (All photos are by the United States Air Force.)

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COVER

Resembling a pre-historic monster, this machine is actually the latest thing for clearing brush and timber. It consists of a giant V-shaped blade mounted on a 200-hp International TD-24 diesel crawler tractor. The blade acts as a sawtooth and cuts off the brush and timber at ground level. It was designed by the Lahar Construction Co., A.G.C., Mountain Home, Ark., who is using two such devices to clear 23,000 acres of timber for a reservoir at the Buford dam site in Georgia. Picture of machine at work on page 98. (Photos by International Harvester.)

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COVER

Work progresses on the $78 million Walt Whitman bridge over the Delaware River between Gloucester City, N. J., and Philadelphia, Pa., which is slated to open next spring. Booth & Flinn Co., Pittsburgh, Pa., is prime contractor for the anchorages, truss span superstructure, and 2,000 feet of concrete roadway on the main span. Bethlehem Steel Co. is handling the main structure and towers. Approaches are being handled under several contracts. (W. A. Kline photo)

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The Official Publication of The Associated General Contractors of America, Inc.

Published monthly. Editorial and Executive Office, Munsey Building, Washington 4, D. C. Subscription price $5.00 per year, 40¢ per copy (July $2.00). Re-entered as second class matter June 10, 1949, at the Postoffice at Washington, D. C., under the Act of March 4, 1879. Copyright 1956 by The Constructor, Inc.

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The Official Publication of The Associated General Contractors of America, Inc.

Published monthly. Editorial and Executive Office, Munsey Building, Washington 4, D. C. Subscription price $5.00 per year. 40¢ per copy (July $2.00). Re-entered as second class matter June 16, 1949, at the Postoffice at Washington, D. C., under the Act of March 4, 1879.

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COVER

Expressway dividers constructed of Flex-Beam guardrail are solving a problem for the city of Atlanta, Ga., on dangerous curves. The double-lined guardrail replaces mesh fences, formerly used in an attempt to prevent drivers from cutting across divider strips. Now the guardrail protects drivers, approaching vehicles and the bridge. It helps keep the car on the road and lets the driver regain control of his car if he leaves the road. (Photo: Armco Drainage & Metal Products, Inc.)

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COVER

These "shop grown" wood arches, still in their paper wrapping from the factory, were made from ordinary sizes of lumber into arches of great engineered strength by the process of glued-lamination. The workmen inserting the crown pin are nearly eight stories above ground. These huge wood arches, 294 feet long and with a clear span of 242½ feet, are being erected in the new Jai Alai Fronton at West Palm Beach, Fla.

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The Official Publication of The Associated General Contractors of America, Inc.

Published monthly. Editorial and Executive Office, Munsey Building, Washington 4, D. C. Subscription price $5.00 per year, 40¢ per copy (July $2.00). Re-entered as second class matter June 19, 1948, at the Postoffice at Washington, D. C., under the Act of March 4, 1879. Copyright 1956 by The Constructor, Inc.

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COVER

As the giant steel structures of the $99 million Mackinac Bridge are carefully erected, the connecting span between the upper and lower peninsula of Michigan takes form. The huge towers, which will support the world's second largest bridge span, are already in place and two barge-mounted Model 3900 Manitowoc 80-ton capacity cranes set the steel structure on the south approach to the bridge. The Mackinac Bridge, one of the most important construction projects in the world today, is scheduled for completion late in 1957. (Photo: Manitowoc Engineering Corp.)

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The Official Publication of The Associated General Contractors of America, Inc.

Published monthly. Editorial and Executive Office, Munsey Building, Washington 4, D. C. Subscription price $5.00 per year, 40¢ per copy (July $7.00). Re-entered as second class matter June 10, 1948, at the Postoffice at Washington, D. C., under the Act of March 4, 1879.

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COVER

Simultaneous blasts set off by President Eisenhower's remote control telegraph key in the White House several thousand miles away, spray the air with rock and dirt at Glen Canyon dam (cover) and Flaming Gorge dam (page 58) to officially mark the start of excavation on the huge Upper Colorado reclamation project. The cover picture was taken by H. L. Fink, 1500 feet down the Colorado River from the blast area.

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Published monthly. Editorial and Executive Office, Munsey Building, Washington 4, D. C. Subscription price $5.00 per year. 40¢ per copy (July $2.00). Re-entered as second class matter June 18, 1948, at the Postoffice at Washington, D. C., under the Act of March 4, 1879. Copyright 1956 by The Constructor, Inc.

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COVER

This month's cover shows the almost-completed 12-unit phase of the new Sir Adam Beck-Niagara Generating Station No. 2 on the Niagara River. To the left at top of the escarpment may be seen four apertures in the cliff face to accommodate future penstocks. Story of the $345 million construction project, involving a monumental tunneling job from above the famous Niagara cataracts for 5½ miles, starts on page 41.

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The Official Publication of The Associated General Contractors of America, Inc.

Published monthly. Editorial and Executive Office, Munsey Building, Washington 4, D. C. Subscription price $5.00 per year, 60¢ per copy (July $2.00). Re-entered as second class matter June 16, 1948, at the Postoffice at Washington, D. C., under the Act of March 4, 1879.

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