

# NUGGETS OF BOULDER COLOR

By Elton Garrett

## BIGGEST DRAFTING BOARD IN THE WORLD

"Come on down with me and I'll show you the biggest drafting board in the world."

Peter Squnkus of Boulder City was showing off to his friend from the east—showing him some of the superlatives of Hoover dam.

"She's a job of superlatives, no foolin'," Peter assured Mister C. Awl, his guest. "Whatever a superlative is—we have 'em. How big do you think a drafting board has a right to be?"

They drove down past Six Companies' warehouse, and around to the carpenter shop and "sawmill." That was in June 1932.

"You see here," said Squnkus proudly, "we have a small sawmill with a crew of two doen carpenters—been working for months, making hundreds of these 'pads' or frames, built of heavy planking and timbers. Each is made to fit into its own particular place, and is different from the others.

"These men have the job of building the lining for the diversion tunnels at the plug segments of the tunnels," he explained pompously.

"When the dam is finished, the

spillway tunnels and the penstock tunnels, taking the water from behind the dam around through the cliffs to the canyon below the dam, will empty into the diversion tunnels, through which the water will flow on past the dam.

"These diversion tunnels, in order not to carry the water back toward the upper portals, will be plugged with huge concrete plugs, more than 50 feet in diameter, which are to be poured just upstream from the junction of the penstock and spillway tunnels and the diversion tunnels themselves.

"These plugs will be round, but of varying diameter thicker toward the side from which the water pressure will come, thus forming the biggest 'corks' in the world, somewhat wedge shaped, one may say. In fact, there will be three 'wedge' shaped units to each plug.

"Therefore the diversion tunnels, at the places where the plugs will be placed, have to be drilled in odd shapes, of varying diameters. These plug 'sites' are three hundred feet in length.

"In order to furnish the 'plug sites' a smooth surface, during the time the water is going through the diversion tunnels in the diver-

sion period, wooden lining to build out the walls to a consistent 50-foot diameter must be built.

"These 'pads', or sections of this frame-like lining must furnish that smooth flat surface after all are put into place, and they must furnish a smooth outside surface behind which the concrete lining to the tunnel will be poured—against which the plugs will be poured after the wooden fill-in frames are removed following the diversion period.

"Now you see this big concrete floor out here under God's sky canopy. It's more than 60 feet across, the floor, I mean and square. It's the world's biggest drawing board. They draw out the sections on it, actual 'life size', and cut the curved pieces of these frameworks to fit the actual markings drawn out here.

"Notice the pivot in the center and the long stick forming the 'compass' working radially around it, and supported by rolling casters. These fellows planning these plug sections have to be real mathematicians, and they have to know their solid geometry, too!"

About a year from the time the work commenced on the largest drafting board in the world, the installation of the last of the plug sections will have been finished. Then, all Squnkus can show his friends there will be the smooth