

## The Knowledge Bank at The Ohio State University

### Ohio State Engineer

**Title:** Double Elevators' Speed to Hoist "Pay Dirt"

**Issue Date:** Mar-1939

**Publisher:** Ohio State University, College of Engineering

**Citation:** Ohio State Engineer, vol. 22, no. 4 (March, 1939), 5.

**URI:** <http://hdl.handle.net/1811/35581>

**Appears in Collections:** [Ohio State Engineer: Volume 22, no. 4 \(March, 1939\)](#)

---

### **Double Elevators' Speed to Hoist "Pay Dirt"**

Electrical equipment will hoist "pay dirt" out of South Dakota's Black Hills twice as fast as the world's speediest passenger elevators. Approximately a quarter of a million dollars' worth of motors, generators and auxiliary units to operate a gold ore hoist and a man-and-material hoist for the new Yates shaft of the Homestake Mining Company, at Lead, S. D., is being built.

Designed to move 4,000 tons of ore up the mile-deep mine shaft every 15 hours, the ore hoist will lift

nine tons to the mouth of the shaft in two and one-half minutes, traveling approximately 35 miles an hour at maximum speed. In an adjoining compartment of the same shaft, the manhoist will carry a 7,000-pound load.

The mouth of Yates shaft (expected to be completed and in operation in about two years) is one mile above sea level on a ridge overlooking the town of Lead in the heart of the largest gold mining operation in the United States. The bottom of the shaft will be approximately at sea level when the shaft is sunk to its ultimate depth.