

Drill bits

Cable tool drill rig and bits – common through the 1930's



Fig. 5-2. Cable tool rig from the 1920s.
Courtesy of Canadian Petroleum
Interactive Centre

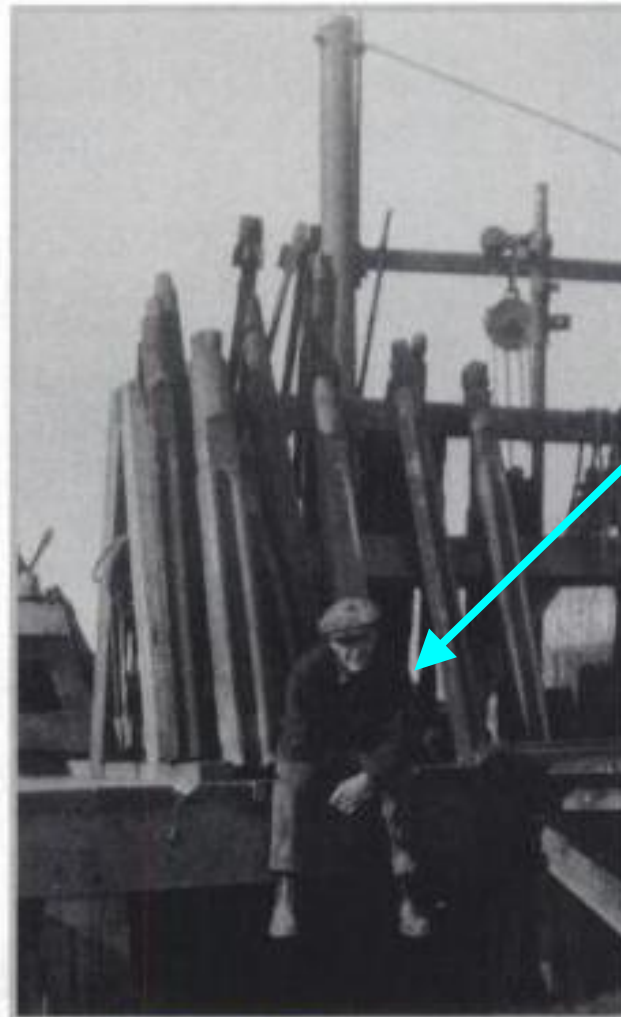


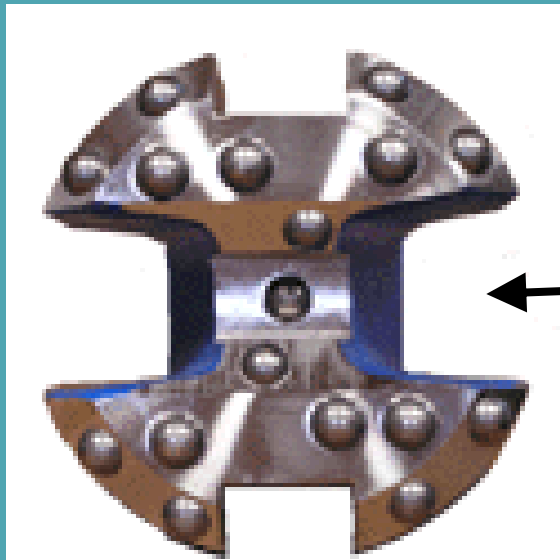
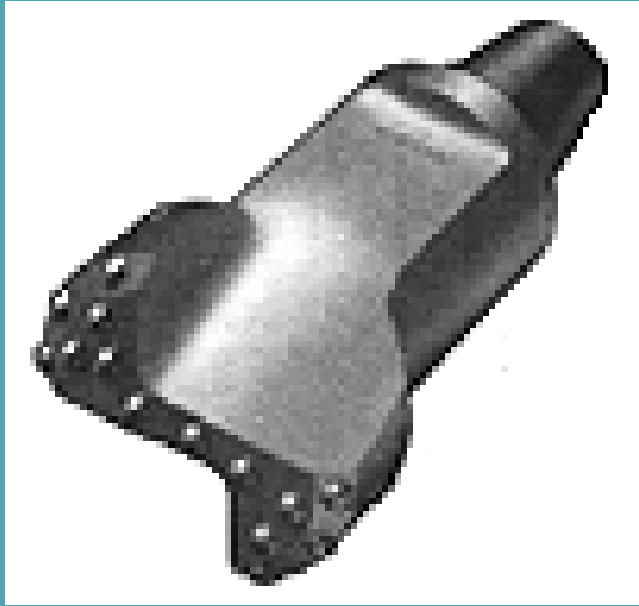
Fig. 5-3. Cable tool bits. Note the design has evolved from a chisel-like end to a fluted column with two chisel points at the end. The flutes allow the bit to drop through water and rock debris more easily

Dr. Suneson

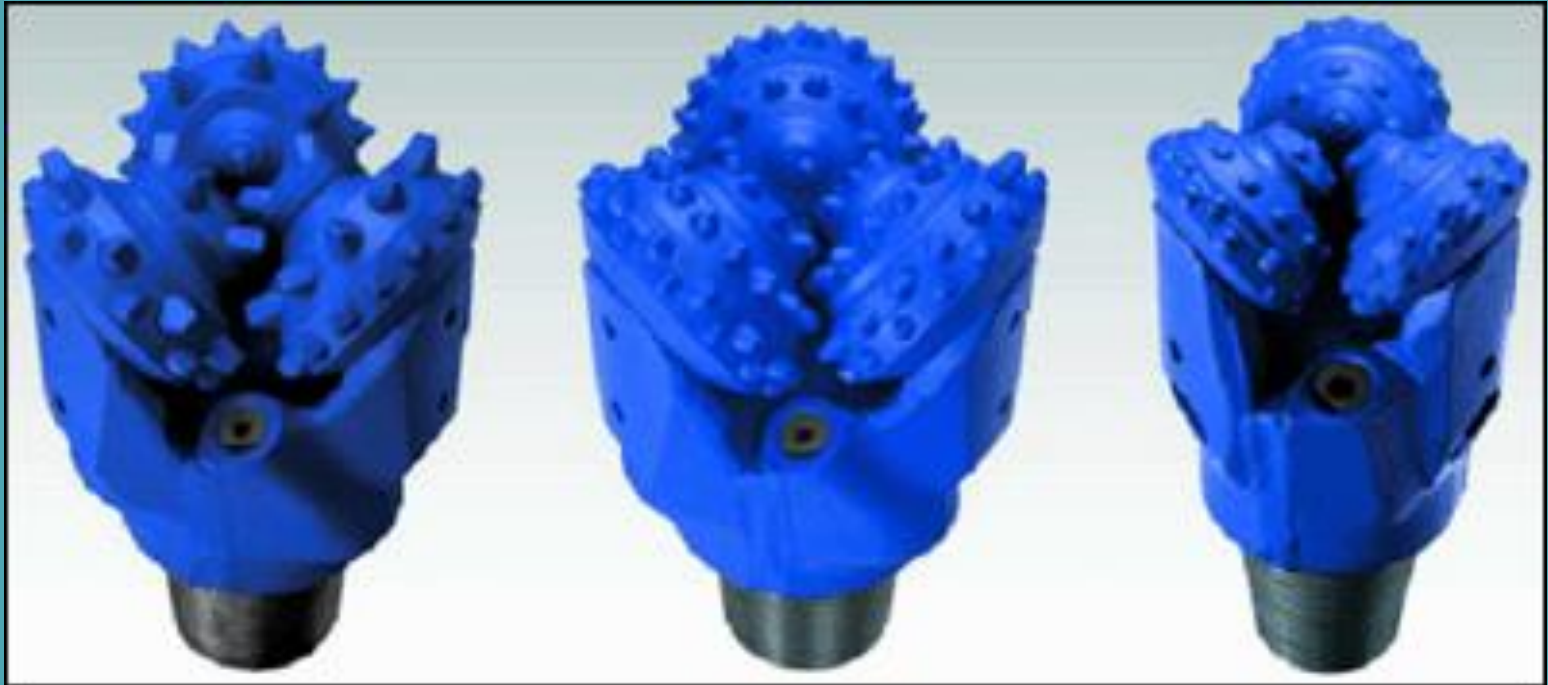


Greatly worn tip of
cable tool bit. From
the abandoned
Redden Oil Field in
southern Oklahoma.

Modern cable tool bits using tungsten carbide inserts



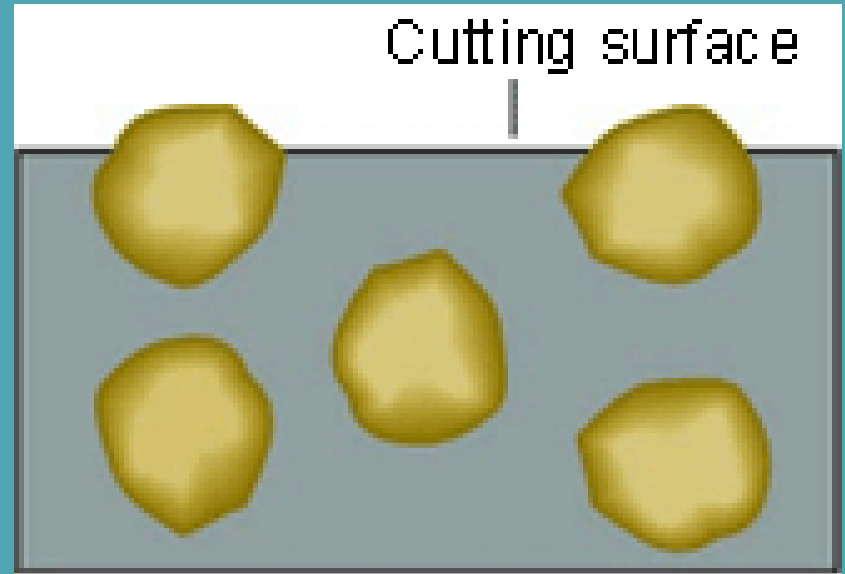
Roller cone bits were standard in the 60's-90's



Roller cone bits have metal cones that rotate independently. Each cone has teeth made of hard steel, tungsten-carbide, PDC, diamonds or a combination of these.

This drill bit cuts through hard rocks using natural diamonds set in patterns in tungsten-carbide blades





“SELF-SHARPENING” BITS

This drill bit has tungsten-carbide blades impregnated with tiny grit-like diamonds, enabling it to grind through very hard rocks. As the tungsten-carbide is worn away at the cutting surface, worn diamond grains fall out and fresh grains become exposed.



The black discs in the cutting edge of the blades on this drill bit are PDC inserts.
(**PDC** = polycrystalline diamond compact)



Typical air-drill bit



And when you screw up and loose iron
down the hole, you generally have to try
and recover it with a **Fishing Tool**



ack

mean the same to everyone.
ity and value simply from a
nal analysis, superiority rests
ependability. Backed with
tise, Logan Oil Tools delivers
g tools that are anything but
after time...classic black is