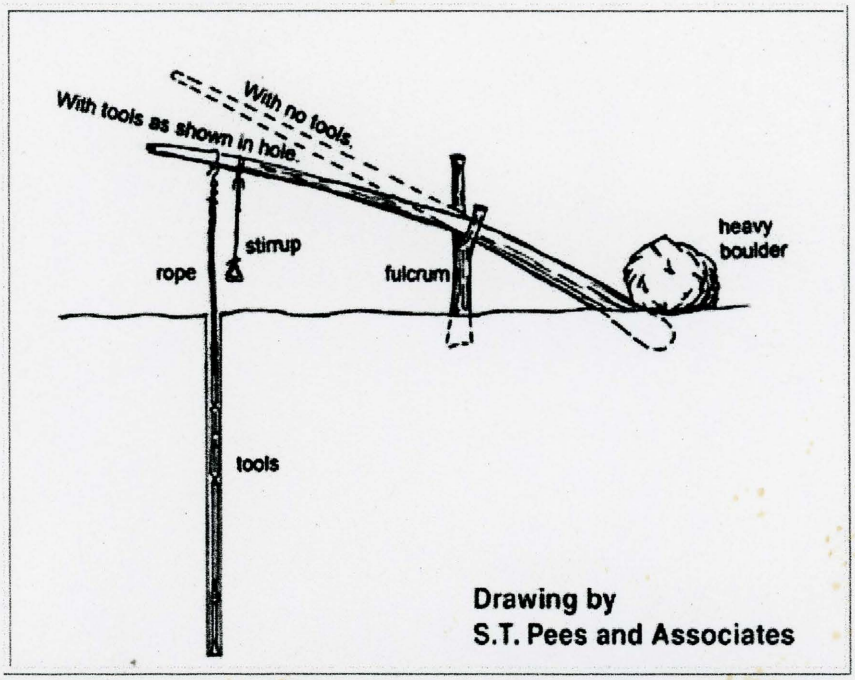
Explanation of the Spring Pole

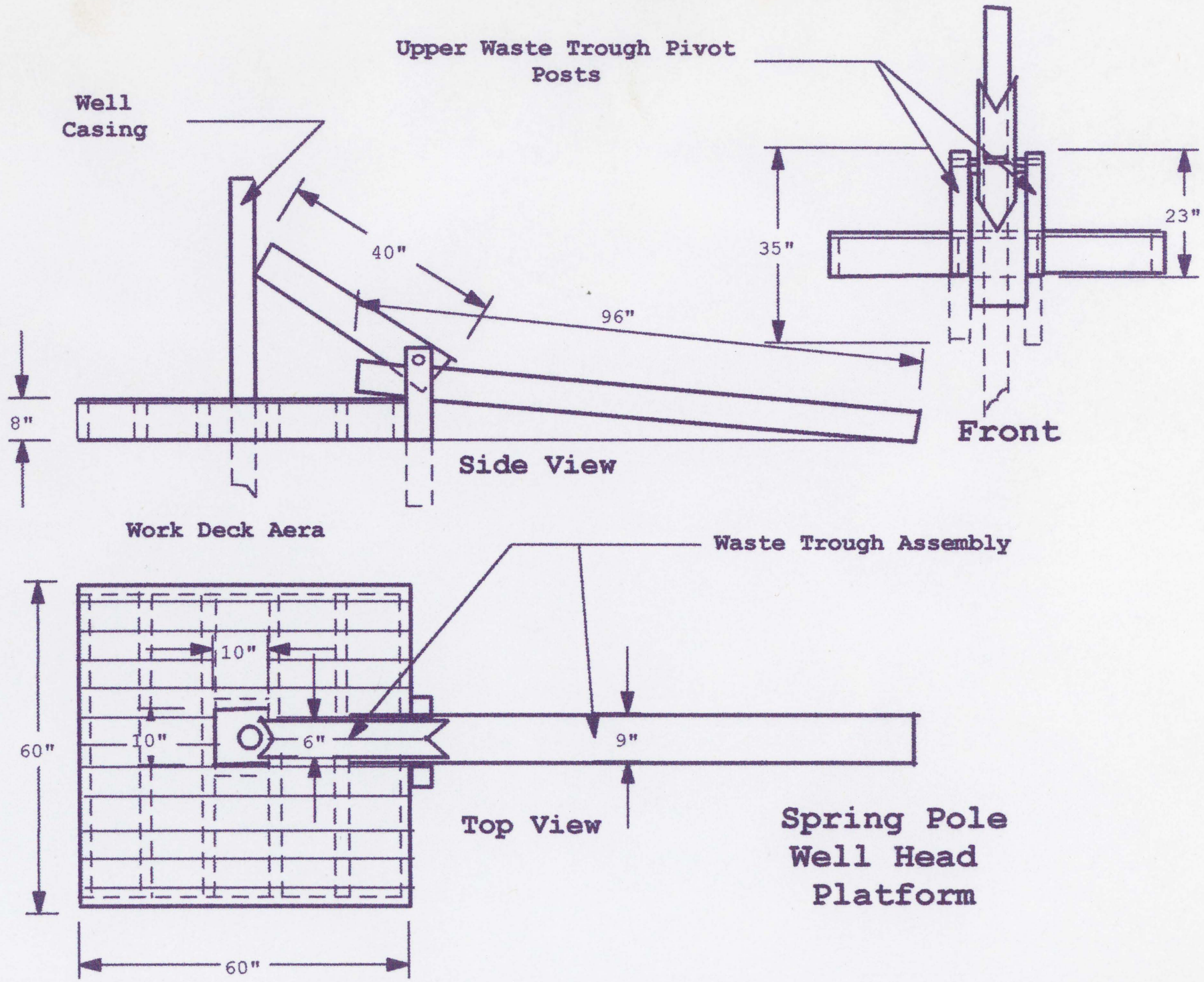
Explaining how the spring pole was used can be difficult, but if the presenting adult understands it, they can describe it easier by using the example as an illustration with more gestures than words.



A lot of wells were started with the spring-pole. This method required strong legs and considerable time. The outfit was simple: a long pole, a weight to anchor the butt end, a fulcrum, stirrup, manila rope, oak rods, downhole tools including the percussion bit. More tools and other improvements would be added to the drill string as time went on.

The stirrup would hang from the spring-pole very near to the intended position of the borehole, maybe 3 1/2 feet to 4 feet from the working end of the pole. It could be a piece of manila rope looped at the bottom or it could resemble the stirrup on a saddle or look more like a playground swing. The drill string (a vertical series of tools and components) would be fastened about 3 feet from the end of the pole. It would consist of manila rope or oak rods with metal connectors, rope socket, a sinker bar, jars, an auger stem and a bit. The downward push of the driller's leg in the stirrup would bring the tip of the pole down and allow the bit to smack the rock. When the rock was smashed, or the dirt loosened, a hollow pipe would be connected to pull it out and the well was drilled just a little bit farther. A highly motivated operator could drill up to 2 or 3 feet in a day under optimal conditions

Once the railroad was developed in Santa Clarita, more modern drilling tools could be shipped in. The first commercially successful oil well in California was drilled here in Santa Clarita in 1877—CSO 4 in Mentryville.


Upper Waste Trough Pivot Posts
Well Casing
40"
96"
35"
23"
8"
Front
Side View
Work Deck Aera
Waste Trough Assembly
10"
10"
6"
9"
60"
60"
Top View
Spring Pole Well Head Platform

2/16/97

Restoration Committee

Spring Pole Drilling Rig

A very productive research effort was completed in the last several days, with information garnered that will allow us to finalize our display with authentic, and detailed equipment and tools. (See attached sketches.) Through the information gathered, including photos, the well head components, will be presented in more detail, allowing for an exact demonstration of the drilling process, used with the typical Spring Pole Rig.

Also, working with a member of one of our local Eagle Scout Troops, we have organized a work party, scheduled for the 22 of March 1997, to re-establish grades and contours at the display site. This program will include: the "manicuring" of grades, ramps, and slopes; the paving of all "cut" slopes with river stones;* construction of stone "curbing" along the "open" side of the pedestrian ramp. (Our thanks to Paul Kreutzer for "connecting" us to the Scouts.)

Included in our finalization effort of this display, is a "rework" of the well site tool chest, the present "sore thumb" looking white finish will be removed, and replaced with a multi-coat application of linseed oil, giving it the same finish as the "pole" and "fulcrum" post.

Don A. Woelke

*Note: Working with Mr. Norm Phillips of the County Parks & Recreation Dept. we have arranged to gather the stones from within the Park.

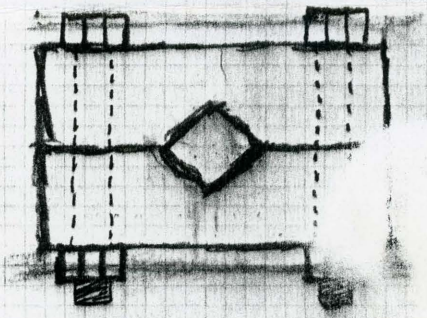
cc: file
P. Helvey
P. Kreutzer

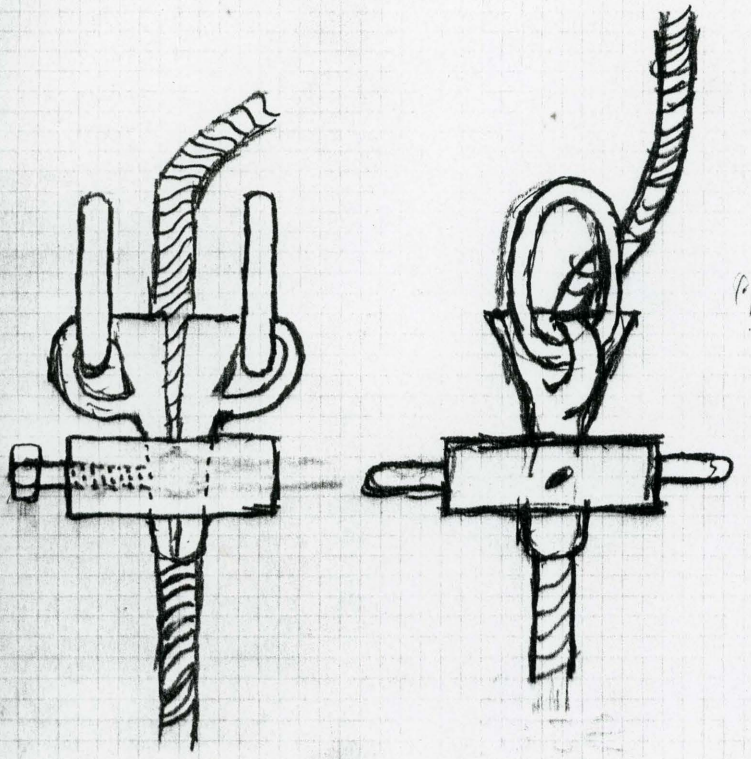
Tear Rope Prong Grab

Bailer

Single Rope Prong Grab

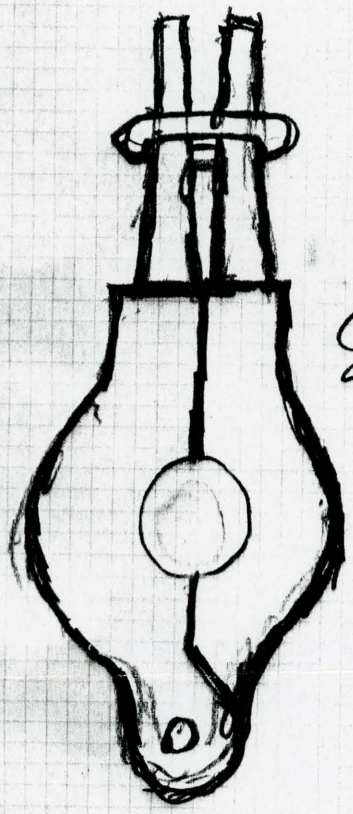
Casing Clamp





Rope Grip.

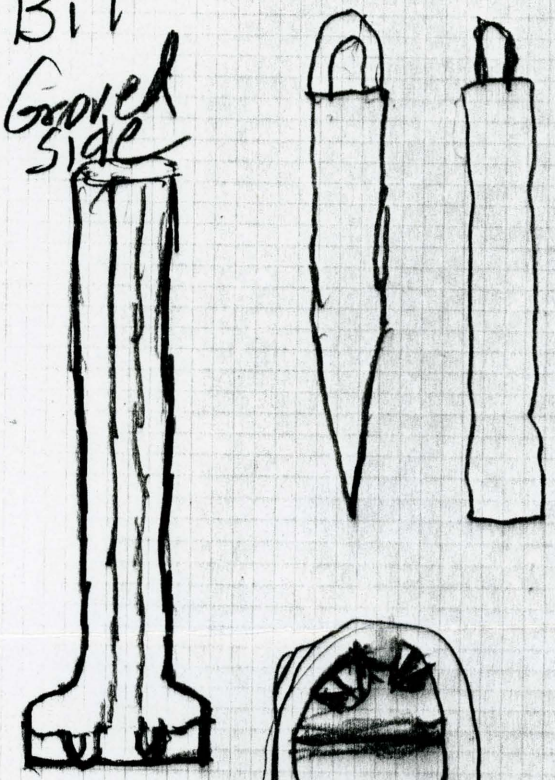
6-3 [illegible]
45-47-48



Slide Tongs

Drill Bit

Grooved Side



Bottom

Spring Pole Well head
Platform
Materials List

Floor Joists, and Frame

2 ea. 2" x 6" x 5' (1 ea. 2" x 6" x 10')

6 ea. 2" x 6" x 4' 9.5" (3 ea. 2" x 6" x 10')

Total: (4 ea. 2" x 6" x 10")

Platform Flooring

11 ea. 1" x 6" x 5' Totals: (5 ea. 1" x 6" x 10')
(1 ea. 1" x 6" x 6'

Waste Trough & Support

2 ea. 1" x 6" x 6'

2ea. 1" x 6" x 3'

2ea. 4" x 4" x 2' Totals: (3 ea. 1" x 6" x 6')
(1 ea. 4" x 4" x [4']6')

Material List:	**Cost:**	
4 ea. 2" x 6" x 10'	**@ $5.67 =**	**$22.68**
5 ea. 1" x 6" x 10'	**@ $5.86 =**	**$29.30**
4 ea. 1" x 6" x 6'	**@ $4.20 =**	**$16.80**
1 ea. 4" x 4" x [4'] 6'	**@ $6.86 =**	**$ 6.86**
	Sub Total	**$74.64**
	Tax @ 8.25%	**$ 6.16**
	Total	**$80.80**