LOCALITY.	Diam. Inches.	Thickness of iron.		Pressure.	
		B.G. No.	Inches.	Head in feet.	Lbs. per Sq. in.
Moore's Flat	12	14	.083	400	173
San Juan	16	18	.049	200	86
Spring Valley Water Co	30	11	.125	365	158
Cherokee	30	00	.375	887	384
Virginia City Water Co	11½	0	.324	1720	750
French Corral	22	10	.134	430	186
Malakoff Diggings	22	10	.134	450	194
Texas Creek	17	8	.165	760	329

THE GIANT.

The illustration shows the most improved pattern in "giants," in which the horizontal movement is around a bolt, made of the best quality of steel and thoroughly annealed, which holds in position the two cast-iron sections connecting the wrought-iron feed and discharge pipes. The vertical movement is provided for by a globe joint connecting the discharge pipe with the uppermost of the cast iron sections. The nozzle is cast iron attached by a screw thread, removable at will, as nozzles of various sizes are made to fit the same "butt" on any giant.

The nozzles range from six to ten inches in diameter, and Mr. Hobson says :—"A small stream, six to seven inches, is more effective in cutting down the banks ; and a large stream of eight, nine or ten inches is the most effective for removing the caved gravel into the sluices." The balance box is essential and is never omitted in giants of any size. The giant is anchored to the floor of the hydraulic pit as shown in the sketch with the addition of side posts at the end of the wooden bed piece in order to prevent a side movement. The greatest force is a thrust, by impact, of water at the angle, and if the giant can be prevented from moving at the forward thrust it will generally remain in place. Care must be taken to secure solid ground for the fastening posts, and in wedging the bulkheads at the front and at the ends of the "giant" bed piece, in order to withstand the enormous pressure from a discharge of fifty to seventy-five cubic feet of water per second under a head of several hundred feet. The discharge at the nozzle is very close to the theoretical in good machines connected by large pipe