~~These experiments (Gilbert's Table 80) and other preliminary unselected tests appear to indicate that it is equally probable that greater velocities may be attained when a load is added to a stream-- especially with increased slopes, particle size, and bed roughness.~~ The basic traction experiments by Gilbert also indicate the interesting possibility that a stream may carry a great load of fine sand particles, yet its capacity for sand particles reaches a minimum, and finally the capacity increases tremendously as the particle sizes are increased to over 1-inch pebbles. The possibilities of extending this study further need not be emphasized but an illustrative set of runs is cited below summarizing the intriguing trends of Gilbert's investigations:

"Table 73. Values of capacity for flume traction, illustrating the control of capacity by fineness of debris." 1/

Channel bed	Width (feet)	Discharge (c.f.s)	Slope (%)	Capacity (grams/sec.) for particle diameters (feet) .00123	.00166	.00561	.0162	.0230	.0547	.110
Planed wood	1.00	.734	3.0	---	1050	665	668	830	910	1630
Sawn wood	1.00	.734	3.0	---	----	495	540	570	970	1490
Wood block	1.00	.734	3.0	---	----	583	---	673	1008	1415
Planed wood	1.00	.363	3.0	---	590	366	398	451	---	625
Planed wood	1.00	.363	2.0	388	---	202	---	268	383	

1/ Gilbert, U. S. Geol. Survey Prof. Paper 86. 1914