appear much disturbed; and the dip varies, being in some places from 10 deg. to 14 deg., and in others from 35 deg. to 40 degrees.

The interstratified beds contain the yellow and variegated ores, the latter generally predominating. These sulphurets are disseminated through the slate in small masses, often of a lenticular form, running with the bedding. They are generally thin and small, but sometimes attain from one-half to three-fourths of an inch in thickness, and occasionally present in section a length of six or even twelve inches. Besides plates and lenticular masses, which interlock and overlap one another, numerous small grains of ore are scattered through the beds, and the average amount of copper in the layer may be stated at from three and a half to five per cent. The copper-bearing beds are sometimes light gray and quartzose, and have at times a chloritic aspect.

In the second shaft of Morrison's adit, the upper copper-bearing bed was met with at a depth of fifteen fathoms. Immediately beneath it was found a quartz course, which contained some very rich copper ore; while the bed itself at this point held scarcely a trace of copper, and could only be distinguished from the adjacent slate by its lighter color and quartzose nature. In sinking Kent's shaft, which is about 170 fathoms to the westward, the same bed is met with at a depth of about twenty fathoms. It has also been intersected by two levels or cross-cuts from the shaft, the lower at thirty fathoms, and followed upwards for a distance of over twenty fathoms on the incline. The working of the bed is now being continued up toward the shaft, as well as east and west from the thirty-fathom level, where it has been wrought for about twenty-five fathoms on its strike, and for ten fathoms in the level above. In the early part of 1862, ten superficial fathoms of the rock from this upper level were broken, weighed, and sampled, and were found to average 258 hundred weight of ore yielding three and a half per cent. of copper (equal to over 1000 pounds of metal) to the fathom of ground. The ore now removed from the working at thirty fathoms averages about five per cent. of copper. In driving the lower cross-cut, a lenticular quartz course was met with, from which there were