has proved a very puzzling study, but the copper ores are found in the rocks of the Huronian age. The older mines, such as the Quincy, Franklin, Atlantic, are working in an Amygdaloid rock, in which great masses of pure copper, so difficult to mine, have been found. Our time, however, was spent mostly at the Calumet and Hecla, the greatest copper mine in the world.

This great mine along with the Osceola, Alluez and Tamarack, is working in a conglomerate containing much felsite and quartz, that has a dip of 38° from the horizontal, and maintains a nearly uniform thickness of eight feet of ore averaging 5% of copper. In the early history of the Calumet and Hecla we read of the long and hard struggle of the men who first realized the great possibilities of this copper-bearing conglomerate, men who, with very limited means, not only spent all the money they could gather, but also labored themselves in the mine amidst many hardships and discouragements. Two of the leaders, or in fact, the two leaders, were Agassiz, a son of the eminent scientist, and a relative, and these two now are enjoying the great wealth this mine is pouring into their coffers.

This mining property embraces the out-crop of the deposit, and along this out-crop the company has thirteen inclined shafts down through the ore body, some over 6,000 feet in length. In the power-houses one sees the finest mining machinery in the world. From each, three or four shafts are operated, the cable drums being driven by one engine. In the chief station is a magnifient engine of 4,700 horse power and costing nearly one half million of dollars. which hoists 5 tons of ore at a time in four shafts besides supplying compressed air for many machine drills. One is simply amazed at the vast assemblage of powerful engines of the finest design, and all in duplicate so that if one breaks down another in a few minutes is doing its work. This summer from 2,500 to 3,000 tons of ore were being mined daily, the ore on reaching the head of the shafts, being run through rock breakers thence into railroad cars which were taken four miles, descending 700 feet, to the concen-