ART. XXIV.—*A New Meteoric Iron*—"The Wisconsin Meteorites"—with some remarks on the Widmannstättian Figures; by J. LAWRENCE SMITH, Louisville, Ky.

THESE meteorites were first brought to my notice by Mr. I. A. Lapham, of Wisconsin, and his attention was called to them by Mr. C. Daflinger, Secretary of the German Nat. Hist. Society of Wisconsin. They were discovered in the town of Trenton, Washington county, Wisconsin, and I have called them the "Wisconsin meteorites." Up to the present time, fragments have been found, indicating that these meteorites were of the same fall and separated at no great elevation. They were found within a space of ten or twelve square yards, very near the north line of the 40 acre lot of Louis Korb, in latitude $43^{\circ} 22' N.$, and longitude $88^{\circ} 8'$ west from Greenwich, and about 30 miles northwest of Milwaukee.

They were so near the surface as to be turned up with the plough; they weigh 60, 16, 10, and 8 pounds respectively, and present the usual pitted and irregular surfaces.

The largest of the meteorites in its extreme dimensions, is 14 inches long, 8 inches wide, and 4 inches thick, weighing 62 pounds. Its specific gravity is 7.82, and composition,

Iron	91.03
Nickel	7.20
Cobalt	0.53
Phosphorus	0.14
Copper	minute quantity
Insoluble residue	0.45

A polished surface when etched gives well marked Widmannstättian figures. There is something, however, peculiar about the markings on this iron, which is doubtless common to other irons, but which has heretofore escaped my observation, and I cannot discover, in a hasty investigation, that it has been noticed by others. My attention was called to this peculiarity by Mr. Lapham, on a slice of the meteorite I sent him etched; should these markings be entitled to a separate notice, I propose calling them *Laphamite markings*. The little drawing accompanying this, which is on a somewhat exaggerated scale, will show what they are.

The Widmannstättian figures are α , bright metallic, with con-

vex ends and sides ; *b c*, of a darker color, are the other markings, usually smaller and with the sides and ends concave. The material of which these dark figures are composed seems to have enveloped the lighter colored portion, which serves to make the dark lines so beautifully conspicuous. A good pocket glass will show that the darker figures are striated, with lines at right angles to the bounding surfaces. When the figure is nearly square, the lines extend from each of the four sides, but when much elongated, as at *c*, they are parallel with the longer sides. Often these lines do not reach the middle of the figure, where only a confused crystallization can be detected. In the interior of the elongated figures, the lines are quite irregular, often running together, and showing a striking resemblance to woody fibre. The nature of these markings may be easily understood. They indicate the axes of minute columnar crystals, which tend to assume a position at right angles to the surface of cooling.

These markings may have been observed by others ; and as soon as the subject can be examined on other irons, a better conclusion can be formed.