

**Article VIII.—CATALOGUE OF METEORITES IN THE  
COLLECTION OF THE AMERICAN MUSEUM OF  
NATURAL HISTORY, TO JULY 1, 1896.**

By E. O. HOVEY.

The Collection of Meteorites in the American Museum of Natural History consists of fifty-five slabs, fragments and complete individuals, representing twenty-six falls and finds. The foundation of the mineralogical department of the Museum was laid in 1874 by the purchase of the collection of S. C. H. Bailey, in which there were a few meteorites. More were acquired with the portion of the Norman Spang Collection of Minerals which was purchased in 1891, and other meteorites have been bought by the Museum from time to time, or have been presented to it by friends. The source from which each specimen came has been indicated in the following catalogue. This publication is made to assist the large number of persons who have become interested in knowing the extent to which the material of various falls and finds has been distributed among collections and the present location of specimens.

**AËROSIDERITES. (IRON METEORITES.)**

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
$\frac{1}{6}$	1784	<b>Tejupilco, Toluca Valley, Mexico.</b> A complete individual, the surface of which has scaled off somewhat. A polished and etched surface shows coarse Widmanstätten figures. ( <i>Bailey Coll.</i> )	1153.
$\frac{1}{32}$	1784	<b>Xiquipilco, Toluca Valley, Mexico.</b> A complete individual of ellipsoidal form, which had been used as a pounder by the natives. ( <i>Spang Coll.</i> )	564.

AËROSIDERITES.—*Continued.*

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
13 32	1784	<p><b>Xiquipilco, Toluca Valley, Mex.—Continued.</b>            An obtusely angular specimen, one side of which has been polished and etched, showing coarse Widmanstätten figures. The original surface has been all scaled off. (<i>Spang Coll.</i>)            [“ In 1784 mention was made of the plentiful occurrence of iron in the valley of Toluca. Report of find in Neues Jahrb. f. Min. 1856, p. 297.” Brit. Mus. Cat. Meteorites, p. 53. 1887.]</p>	251.
13 11	Recognized in 1811	<p><b>Elbogen, Bohemia.</b>            A rectangular chiseled and sawed fragment. Shows poor Widmanstätten figures. (<i>Spang Coll.</i>)            [“ Preserved for centuries at the Rathhaus of Elbogen ; its meteoric origin was recognized by Neumann in 1811. Report of find in Gilb. Ann., 1812, Vol. XLII, p. 197.” Brit. Mus. Cat. Meteorites, p. 44. 1887.]</p>	6.4
13 16	1840	<p><b>Magura, Szlanicza, Arva, Hungary.</b>            A sawed slab showing natural surface on one edge. Etched surface shows small, indistinct markings. (<i>Spang Coll.</i>)            [“ Made known by Haidinger in 1844. Pogg. Ann., 1844, Vol. LXI, p. 675.” Brit. Mus. Cat. Meteorites, p. 44. 1887.]</p>	43.
13 14	Fell July 14, 1847	<p><b>Braunau, Bohemia.</b>            A sawed, cuneiform piece showing part of an original surface pit. (<i>Spang Coll.</i>)</p>	26.4
13 15	1847	<p><b>See-Läsgen, Brandenburg, Prussia.</b>            An irregular, chiseled fragment. (<i>Spang Coll.</i>)            [“ Found in draining a field ; several years afterward, in 1847, it was recognized by Glocker as meteoric. Report of find in Pogg. Ann., 1848, Vol. LXXIII, p. 329 ; 1849, Vol. LXXIV, p. 57.” Brit. Mus. Cat. Meteorites, p. 43. 1887.]</p>	18.3
13 15	1853	<p><b>Tazewell, Claiborne Co., Tenn.</b>            Oblong, rectangular, sawed piece. (<i>Spang Coll.</i>)            Plowed up on a farm about ten miles west of the village in 1853. Described by C. U. Shepard, Am. Jour. Sci., II, xvii, p. 325. 1854.</p>	52.

AËROSIDERITES.—*Continued.*

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
13 34	1858-9	<p><b>Staunton, Augusta Co., Va.</b></p> <p>A polished slab 80 x 75 x 6 mm., one surface etched, showing excellent Widmanstätten figures. (<i>Spang Coll.</i>)</p> <p>Found in 1858 or 1859 by a colored man named Alf, of the Robert Van Lear plantation, who afterwards threw it away, as he could not sell it for the price he asked (one dollar). After lying neglected for some years it was put with other loose material into a stone wall. Its great weight and irregular shape caused it to fall out of the wall, and it was then used for some time as an anvil. Afterwards it was built into the curbing of a cistern. Here, during the summer of 1877, it was noticed by Mr. M. A. Miller, of Staunton, who obtained it and then disposed of it to Ward and Howell, of Rochester, from whom Mr. Spang procured the slab now in the Museum. Described by J. W. Mallett, <i>Am. Jour. Sci.</i>, III, xv, p. 337, 1878, whence the above-given account was taken.</p>	217.
13 16	1884	<p><b>Glorieta Mt., Santa Fé Co., New Mexico.</b></p> <p>A complete individual, irregularly meniscus-shaped. Surface pitted and torn. Etched surface shows Widmanstätten figures. (<i>Purchased from G. F. Kunz.</i>)</p> <p>A slab 180 x 123 x 5 to 9 mm. in size. Both sides have been etched and show the typical Widmanstätten figures very perfectly. Three edges show the original surface of the mass. (<i>Purchased from G. F. Kunz.</i>)</p> <p>Found on a rock on the side of the mountain one mile northeast of the village of Canoncito by a prospector searching for gold. Described by G. F. Kunz, <i>Am. Jour. Sci.</i>, III, xxx, p. 235. 1885.</p>	24, 154.
13 26	1891	<p><b>Cañon Diablo, Arizona.</b></p> <p>A polished slab 278 x 137 x 7 to 17 mm. in size, an entire section of the mass. Much cohenite is present, frequently inclosing flakes and plates of schreibersite. Three irregularly ellipsoidal nodules are prominent in the mass. They consist of troilite associated with more or less of a relatively soft graphitic (?) substance, and surrounded by a shell of schreiber-</p>	772.

AËROSIDERITES.—*Continued.*

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
		site, outside of which is a shell of cohenite. The Widmanstätten figures are broad and interrupted, giving the mass an almost granular appearance. <i>(Purchased from E. E. Howell.)</i>	2285.
		A complete individual; in shape an irregular, elongated, four-sided pyramid. <i>(Purchased from E. E. Howell.)</i>	14.7
		Described by A. E. Foote, <i>Am. Jour. Sci.</i> , III, xli, p. 413, 1891, and by O. A. Derby, <i>Idem</i> , III, I, p. 101, 1895.	
13 27	1893	<b>El Capitan Mts., New Mexico.</b> A polished slab 126 x 124 x 4 to 6 mm. in size, showing the original surface of the mass on all edges. The Widmanstätten figures are long and slender, with occasional broad bands. Many of the interspaces show a second, much smaller set of markings. One large nodule of troilite. <i>(Purchased from E. E. Howell.)</i>	455.
		Described by E. E. Howell, <i>Am. Jour. Sci.</i> , III, I, p. 253. 1895.	
13 19	?	<b>Berg Emir, Siberia.</b> An irregular chiseled piece showing a torn surface. This locality does not appear in Lippincott's Gazetteer. <i>(Spang Coll.)</i>	78.
		Total weight of Aërosiderites. . . . .	30,089.8

AËROSIDEROLITES. (IRON-STONE METEORITES.)

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
13 2	1847	<b>Rittersgrün, Erzgebirge, Saxony.</b> A polished slab in which the stony portion exceeds the metallic. The iron shows delicate Widmanstätten figures. <i>(Bailey Coll.)</i>	26.4
		A polished piece in which the iron exceeds the stony matter in amount. <i>(Bailey Coll.)</i>	14.2
		[* Reported by A. Breithaupt in 1861. <i>Zeitsch. d. deutsch. Geol. Gesell.</i> , Vol. XIII,	

## AËROSIDEROLITES.—Continued.

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
13	1861	<p>p. 148. But according to A. Weisbach it was really found in 1833. '<i>Der Eisenmeteorit von Rittersgrün in sächsischen Erzgebirge: von A. W.: Freiberg, 1876.</i>' Brit. Mus. Cat. Meteorites, p. 57. 1887.]</p> <p><b>Breitenbach, Erzgebirge, Saxony.</b></p> <p>An irregular piece, one side of which has been polished and etched. The particles of iron show Widmanstätten figures. The outer surface has been much rusted. The olivine and other stony matter exceed the iron in amount, and the whole seems to be identical with the specimens from Rittersgrün, No. <math>\frac{13}{8}</math>. They are probably parts of the same fall.</p> <p>(Spang Coll.)</p> <p>Described by N. S. Maskelyne in 1871. <i>Phil. Trans.</i>, Vol. CLXI, p. 359. Rittersgrün and Breitenbach are within three English miles of each other, and the aërosiderolites probably fell at the same time. Breithaupt suggests that this was the fall reported to have taken place at Whitsuntide in the year 1164. <i>Berg. u. hütt. Zeitung</i>, 1862, Jahrg. XXI, p. 321: Buchner suggests a fall which took place between 1540 and 1550. <i>Die Meteoriten</i>, etc.: von Otto Buchner: Leipzig, 1863, p. 124. [Adapted from Brit. Mus. Cat. Meteorites, p. 57. 1887.]</p>	76.
13	Fell May 10, 1879.	<p><b>Estherville, Emmet Co., Iowa.</b></p> <p>Twenty-two complete individuals, ranging in weight from 1.5 g. to 26.2 g. All show the nickel-white, rounded knobs of iron.</p> <p>(Bailey and Spang Colls.)</p> <p>An irregular mass, apparently showing none of the original crust.</p> <p>(Purchased from Miss F. A. M. Hitchcock.)</p> <p>An irregular mass like the last, but showing a little of the crust.</p> <p>(Spang Coll.)</p>	212.6
13	?	<p><b>Desert of Atacama, South America.</b></p> <p>About half of a spheroidal mass, in which the iron much predominates over the included olivine. Much of the original surface has scaled off, but many of the pits still show. Apparently different from No. <math>\frac{13}{8}</math>, and may be the pallasite of Imilac.</p> <p>(Presented by Mrs. R. L. Stuart.)</p>	4876.

AËROSIDEROLITES.—*Continued.*

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
13 13	?	<b>Ensisheim, Elbogen, Bohemia.</b> A very irregular, spongy iron, which has lost its original inclusions, closely resembling the original Pallas iron. ( <i>Spang Coll.</i> ) There seems to be some confusion about the locality here, since the meteorite from Ensisheim, Alsace, is an aërolite and that from Elbogen, Bohemia, is a holosiderite.	4.5
13 30	?	<b>Desert of Atacama, South America.</b> A sharp-pointed, irregular mass of very spongy iron, from which the stony matter has largely decomposed and has fallen out to some extent. Apparently different from No. 13. ( <i>Spang Coll.</i> )	13.3
13 31	?	<b>Mount Kemis, Siberia.</b> An irregular, spongy iron, which has lost its original inclusions. ( <i>Spang Coll.</i> ) This locality does not appear in the Gazetteer. The iron is like the Pallas iron from Medwedewa, Krasnojarsk, Siberia.	31.
Total weight of the Aërosiderolites. . . . .			5450.5

## AËROLITES. (STONE METEORITES.)

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
13 7	Fell May 1, 1860.	<b>New Concord, Ohio.</b> A fragment from the interior, preserving none of the crust. This is a gray rock with minute metallic (iron) points scattered thickly through it. ( <i>Bailey Coll.</i> )	44.5
13 4	Fell June 9, 1866.	<b>Knyahinya, near Nagy-Berezna, Hungary.</b> A sub-rectangular individual with grayish-black skin, which has been removed at one spot showing the gray interior with its minute particles of iron. ( <i>Bailey Coll.</i> ) A complete, rudely wedge-shaped individual preserving its dull black crust nearly entire. The surface is indented with closely-set small pits. The description makes it probable that this is the correct locality for this stone, though none was given on the Spang label. ( <i>Spang Coll.</i> )	35. 75.4

AËROLITES.—*Continued.*

Cat. No.	Date of Discovery.	NAME AND DESCRIPTION.	Weight in grams.
1 <sup>a</sup> <sub>1</sub>	Fell Jan. 30, 1868.	<b>Pultusk, Poland.</b> A complete, hemispheroidal individual, preserving its thin rusty-black crust. A chipped place shows the light gray interior with its metallic grains. <i>(Bailey Coll.)</i>	51.2
1 <sup>b</sup> <sub>3</sub>	Fell May 21, 1871.	<b>Searsmont, Waldo Co., Maine.</b> A cuboidal fragment from the interior. Light gray rock with numerous small brown patches. Numerous particles of iron are scattered through the mass, and there is one angular piece (part of a crystal?) of pyrrhotite. <i>(Spang Coll.)</i>	4.2
1 <sup>b</sup> <sub>6</sub>	Fell Feb. 12, 1875.	<b>Homestead, Iowa Co., Iowa.</b> A nearly complete individual, roughly pyramidal in shape, showing broad shallow surface pits. The thin, dull-black crust has been broken off in spots, revealing the dark gray interior with minute metallic points scattered through it. This is the fall entered as "West Liberty" in the British Museum catalogue of meteorites. <i>(Purchased from H. T. Woodman.)</i>	583.
1 <sup>b</sup> <sub>18</sub>	Fell Feb. 3, 1882.	<b>Möcz, Transylvania.</b> A complete, wedge-shaped individual. The comparatively thick, dull-black crust is intersected by a network of fine cracks. The interior is gray with small brown spots in it, and with numerous fine veins and particles of iron scattered through it. <i>(Spang Coll.)</i> Two smaller complete individuals presenting the same characters. <i>(Spang Coll.)</i>	165. 24.7 11.4
Total weight of Aërolites.....			994.4

Total weight of Aërosiderites.....	30,089.8
“ “ Aërosiderolites.....	5,450.5
“ “ Aërolites.....	994.4
Grand Total.....	36,534.7

