

WILLIAM EARL HIDDEN

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*New York City**(Continued from page 129)*

Besides being instrumental in the determination of "hiddenite," Hidden discovered another new precious stone, the garnet variety "rhodolite" (from *rhodon*, the Greek for rose) in the Cowee Valley, Macon County, North Carolina. He also discovered a number of new mineral varieties, one of which, a form of rutile, he named "edisonite," after Thomas A. Edison¹; another, a hydrous silicate of thorium and uranium, he named "mackintoshite" after his faithful collaborator, J. B. Mackintosh. In connection with the latter, Hidden also described auerlite, a hydrous phospho-silicate of thorium, named after Dr. Carl Auer von Welsbach, inventor of the Welsbach light; sulphohalite, a chloro-sulfate of sodium; yttrialite, a silicate of the yttrium metals and thorium; thorogummite, a silicate of thorium; and rowlandite, a silicate of yttrium, named after Prof. Henry A. Rowland.

Another mineral described by Hidden, in collaboration with J. B. Mackintosh, was the eudialyte (eucolite) of Magnet Cove, Arkansas; and with Dr. James Hyde Pratt he reported on an occurrence of the rare platinum mineral, sperrylite, near the summit of Mason Mountain, North Carolina, in fissures and cavities of a rock made up essentially of rhodolite and biotite.

Hidden was greatly interested in meteorites, and described the following falls:

- Chulafnee; from Clebourne County, Alabama.² Found in 1873; weight 14.75 kg. (32.5 pounds). It originally weighed more, but a piece of about 1½ kg. was broken off by a blacksmith who worked the iron into horseshoe nails and a plow point.
- Fort Duncan; from Maverick County, Texas. Weighs 43.5 kg. (96 pounds) and is associated with the great meteoric fall in the State of Coahuila, Mexico.
- Dalton; from Whitfield County, Georgia.
- Hayden Creek; from Lemhi County, Idaho.

^{1, 2} See bibliography at the end of the paper.

Joe Wright Mountain; from Independence County, Arkansas.
Laurens County; from Laurens County, South Carolina.
Lick Creek; from Davidson County, North Carolina.
Mazapil; from State of Zacatecas, Mexico.

About 1880, he examined and described the meteorite found in 1877 on a farm some twenty miles northeast of Dalton, Whitfield Co., Ga. As he saw it in the State museum at Atlanta it weighed 4.4 kg. (9.7 pounds), but it is said to have originally weighed 6 kg. He found it to be of the usual composition, with deliquescent chloride of iron in many spots, and he notes that the region where it was discovered, near the Tennessee and North Carolina boundaries, is remarkable for the number of meteorites it has afforded.

One of the principal American meteorites was the famous Mazapil meteoric iron from the State of Zacatecas, Mexico, seen to fall on the night of November 27, 1885, weighing about 4 kg., and believed to have had some connection with Encke's Comet. Hidden's entire collection was purchased by the Imperial Museum of Vienna, where it now is.

Hidden profited by many of his discoveries, exploring and developing each deposit, only to sell out and turn to another. He was the strongest factor in developing North Carolina gem occurrences, the emerald, hiddenite, rutile, quartz, etc. Later, he aided in the opening up of the turquoise mines of New Mexico. The development of the Welsbach light led to his search for zircon and monazite deposits in the South Atlantic States, and later the rare minerals in Llano County, Texas.

Early in 1903 he had purchased from the Piedmont Mineral Company, Limited, of London, England, a tract of mineral land in Texas, 24 acres in extent. It is described in the deed as being on the west bank of the Colorado River, in Llano Co., Texas, and the deposits include many of the rare yttrium and erbium ores. The altered variety of zircon, cyrtolite, is also mentioned as being present. In May, 1903, a few months after his purchase, he was able to sell the property to the Nernst Lamp Company, the Trustees of which have since resold the land, reserving the mining and mineral rights. His articles describing his explorations of this deposit, and the remarkable minerals found there, make extremely interesting reading.

Hidden subsequently became interested in the Nipissing Min-

ing Company, and wrote a report on the mines of this company at Cobalt, Canada. He also described the La Rosa mining property at the same place. And still more recently he was connected with the development of a large copper property known as the "Sunshine" in southern California.

PAPERS BY WILLIAM EARL HIDDEN IN AMERICAN JOURNAL OF SCIENCE
In 3d Series, 1871-1895

- Meteorite from Cleberne Co., Alabama. 19, 370, 1880.
 New locality of fergusonite. 20, 150, 1880.¹
 New meteoric iron from North Carolina. 20, 324, 1880.
 Octahedrite, Burke Co., North Carolina. 21, 160, 1881.
 Xenotime, Burke Co., North Carolina. 21, 244, 1881.
 Whitfield Co., Georgia, meteoric iron. 21, 286, 1881.
 Geniculated zircons. 21, 507, 1881.
 North Carolina minerals and localities: 21, 159, 1881; 22, 21, 489, 1881; 24, 372, 1882; 29, 249, 1885; 32, 483, 1886.
 Fluid-bearing quartz crystals. 25, 393, 1883.
 Herderite, a glucinum-calcium phosphate, from Oxford Co., Maine. 27, 73; (With J. B. Mackintosh), 135, 1884.
 Tourmaline from Maine. 27, 154, 1884.
 Phenacite (from Florissant, Col.). 29, 249, 1885.
 Transparent crystal of microlite. 30, 82, 1885.
 Hanksite from California. 30, 133, 1885.
 Meteorites from Independence Co., Arkansas, and from Laurens Co., South Carolina. 31, 460, 1886.
 Contributions to mineralogy by W. E. Hidden, with crystallographic notes by A. des Cloizeaux. 32, 204, 1886.
 Meteorite from (Maverick Co.), Texas. 32, 304, 1886.
 Mazapil meteorite. 33, 221, 1887.
 (With H. S. Washington) Contributions. 33, 505, 1887.
 Edisonite, a fourth form of titanite acid. 36, 272, 1888.
 (With J. B. Mackintosh) Yttria and thoria minerals from Llano Co., Texas. 38, 474, 1889.
 Eudialyte from Magnet Cove, Arkansas. 38, 494, 1889. (With S. L. Penfield) Hamlinite. 39, 511, 1890.
 (With Mackintosh) Polycrase of North and South Carolina. 34, 302, 1890; 41, 423, 1891. Mineralogical notes. 41, 438, 1891.
 New yttrium silicate (rowlandite). 42, 430, 1891.
 Mackintoshite, a new thorium and uranium mineral with analyses by W. F. Hillebrand. 46, 98, 1893.
 Zoisite, Mitchell Co., North Carolina. 46, 154, 1893.
 (With W. F. Hillebrand) Rowlandite. 46, 208, 254, 1893.
 Notes. 46, 254, 1893; New localities for turquoise. 46, 400, 1893.

¹ "Besides other results of my search for platinum in the auriferous gravels of the Southern States, is the discovery in July, 1879, of the mineral *fergusonite* at Brindletown, Burke County, North Carolina."

In 4th Series

- (With J. H. Pratt) Rhodolite, Sperryllite, zircon, etc., North Carolina. 5, 294, 1898; 6, 323, 381, 463, 1898.
 (With Judd) Ruby (at Cowee Creek), North Carolina. 8, 370, 1899.
 Hayden Creek, Lemhi Co., Idaho, Meteorite. 9, 367, 1900.
 Corundum twin (Coler Fork of Cowee Creek, Marion Co.), North Carolina. 13, 474, 1902.
 Results of late mineral research in Llano Co., Texas. 19, 425, 1905.
 Cassiterite, a new cleavage. 20, 410, 1905.
 (With C. H. Warren) Yttrocasite. 22, 515, 1906.

IN TRANSACTIONS OF THE NEW YORK ACADEMY OF SCIENCES

- Discovery of emeralds in North Carolina. 1, 101, 1882.
 Phenomenal pocket of quartz crystals. 1, 131, 1882.
 Meteorite from Maverick Co., Texas. 5, 231, 1886.

IN MINERALOGICAL MAGAZINE AND JOURNAL OF THE MINERALOGICAL SOCIETY (ABSTRACTS)

- Herderite in Maine. 5, 335, 1884.
 Edisonite. 9, p. 38, 1890.
 (With Hillebrand) Mackintoshite. 10, 341, 1894.
 (With Hillebrand) Rowlandite. 10, 338.

PROCEEDINGS OF SOCIETIES

THE PHILADELPHIA MINERALOGICAL SOCIETY

Wagner Free Institute of Science, September 11, 1919

A stated meeting of the Philadelphia Mineralogical Society was held on the above date with the president, Dr. Leffmann, in the chair. Sixteen members and two visitors were present.

The following officers were nominated for 1919-1920: President: Dr. Herman Burgin; Vice-president, Mr. Harry W. Trudell; Treasurer, Mr. Harry A. Warford; Secretary, Mr. Samuel G. Gordon.

Mr. Gordon presented an account, illustrated with slides and specimens, of a mineralogical trip taken thru Pennsylvania during July. Gorman's quarry, East Goshen; General Trimble's mine, near Planebrook; the Chester Co. mine, near Phoenixville; and French Creek mines, in Chester County, were first visited. At Robeson, Berks County, a number of zeolites were obtained, including epidesmianite; at Cornwall, Lebanon County: pyrite, chalcopyrite, magnetite, calcite, serpentine, asbestos, chlorite, aragonite, and byssolite; at Kimmel's farm, 3 km. north of New Kingston, Cumberland Co., quartz crystals; at the old wavellite mine, 2½ km. southeast of Moore's Mill, Cumberland County: wavellite, beraunite, cacoxenite, and strengite, in very attractive specimens. This mine has been abandoned for 10 years, and no good crystals of wavellite were obtained. Another old wavellite mine at Ross farm, just west of the Tuscarora River, 8 km. south of Blairs Mills in Huntington Co. (and 60 km. northwest of the previous mine) was visited, but no specimens were found, as the mine has been abandoned for over 20 years