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# THE DODGE FAMILY: AN ENDURING TRADITION OF ENTOMOLOGY

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**ABSTRACT.** The brothers Edgar A. Dodge and George M. Dodge studied insects during the late 19th and early 20th centuries. They corresponded and exchanged countless specimens with many prominent entomologists. Their younger brother, Charles F. Dodge, collected insects to a lesser extent. The Dodges obtained specimens primarily where they resided in Illinois, Nebraska, Missouri, and California. Edgar's son, Ralph E. Dodge, collected moths, mostly in Nebraska and California. Detailed biographical information is provided for these members of the Dodge family, as well as for John P. Strohbeen, who collected Lepidoptera with Edgar in California. Their photographs are presented for the first time. George described 17 taxa of Lepidoptera and Orthoptera, which are summarized with remarks about related type specimens. Also listed are seven entomological patronyms that honor Edgar and George.

Additional key words: Charles Francis Dodge, Edgar Addison Dodge, George Marshall Dodge, Ralph Edgar Dodge, John Peter Strohbeen, type specimens

The entomological literature is filled with references to the name "Dodge", especially in association with the insects of Illinois, Nebraska, Missouri, and California. Brothers George M. Dodge (1846–1912) and Edgar A. Dodge (1853-1933) supplied insect specimens and information to scores of leading entomologists, including William Barnes, Ernest L. Bell, Foster H. Benjamin, John A. Comstock, William H. Edwards, Jeane D. Gunder, Samuel Henshaw, Theodore L. Mead, Herbert K. Morrison, Samuel H. Scudder, F. H. Herman Strecker, Edward P. Van Duzee, and Roswell C. Williams. Edgar had an early influence on the 20th century lepidopterist, James W. ("Bill") Tilden who was an authority on California butterflies (Smith 1990). Edgar's son, Ralph E. Dodge (1892-1925) shared his father's interest and collected moths for many years. Charles F. Dodge (1862–1936), youngest brother of George and Edgar, also studied insects, but to a lesser degree.

Edgar and George sold and exchanged countless insect specimens. They placed advertisements in a number of entomological periodicals, even some published outside North America. Articles and observations by the Dodge brothers appeared in a variety of journals and bulletins, including the American Entomologist and Botanist, American Gardening, the Auk, the Canadian Entomologist, Entomological News, Gleanings of Bee Culture, Insect Life, Lepidoptera, and the Lepidopterist. A prodigious author, George described 17 taxa of Lepidoptera and Orthoptera. Specimens collected by George and Edgar contributed to the descriptions of many additional insects, some of which bear the name *dodgei* in tribute. Van Duzee (1921) recognized Edgar for his "efficient work in the cause of entomology" and "courteous assistance to students of insects whose paths of effort are fortunate enough to meet his." Edgar was also interested in ornithology and horticulture (Widmann 1908, E. Dodge 1897).

Despite their numerous contributions, biographical information about the Dodges was sorely lacking. Their dates of birth and death were obscure and their photographs were never published. Even their names were incorrectly cited in the literature, such as Edwards' (1887–1897) erroneous allusion to "Edward A. Dodge." Van Duzee (1933) and Ewan & Ewan (1981) published brief biographical notes about Edgar. George received very little notice, despite being more widely published. A few brief remarks about George and Edgar were offered by Meiners (1949), dos Passos (1951), and Irwin (1972). Charles was completely overlooked entomologically, though details of his personal life were published by Baldwin & Baldwin (1932). A few remarks about Ralph's entomological work were offered by Van Duzee (1925).

The Dodges lived in five different states, but the timing of their moves was poorly understood (e.g. Brown & Miller 1980). In addition, the tendency of the family to live in towns with state's names has resulted in persistent confusion about the localities where George and Edgar collected insects (McDunnough 1950, Metzler 1987). To better appreciate the Dodges and their entomological contributions, I offer a long-overdue glimpse into the lives of these devoted naturalists.

#### METHODS

Over 100 letters and postcards from George M. Dodge and Edgar A. Dodge, dated 1870–1932, were located and examined. The recipients, and the



FIGS. 1–7. 1, (L–R), George M. Dodge, Edgar A. Dodge, and Charles F. Dodge in 1892. 2, Charles, ca. 1890. 3, Edgar in 1901, with his wife and daughter. 4, George, 1910. 5, Ralph E. Dodge, 1919. 6, labels from Dodge specimens. Top: replacement label of C. P. Whitney (female syntype of *H. pawnee*, Glencoe, Nebraska, 9 July 1873, PMNH); Bottom: original G. M. Dodge label (female topotype of *H. pawnee*, Dodge Co., Nebraska, 1880; CAS). 7, John P. Strohbeen, ca. 1960.

repositories of their correspondence, are as follows: Foster H. Benjamin (among the manuscripts of William Barnes, National Archives, Kansas City, Missouri; NAKC), Joseph P. B. Henshaw and his older brother, Samuel Henshaw (Ernst Mayr Library, Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts; MCZ), Theodore L. Mead (Archives and Special Collections, Olin Library, Rollins College, Winter Park, Florida; RC, and McGuire Center for Lepidoptera and Biodiversity, Florida Museum of Natural History, Gainesville, Florida; MGCL), Samuel H. Scudder (Lyman Library, Museum of Science, Boston, Massachusetts; BMS), F. H. Herman Strecker (Research Library, Field Museum of Natural History, Chicago, Illinois; FMNH), and Edward P. Van Duzee (Library of the California Academy of Sciences, San Francisco, California; CAS). Also examined were copies of letters that Benjamin, Mead, and Van Duzee sent in response to George and Edgar. Correspondence is cited by date (day.month.year) and repository (as abbreviated above).

Also consulted were a variety of additional sources, including federal and state census records, state death indexes, gazetteers, city directories, military and voter registries, society membership lists, and local historical essays. I obtained digital images of the Dodge's Lepidoptera collection catalog, which was bequeathed to CAS with Edgar's insect collection. Finally, I received valuable information and photographs from members of the Dodge and Angle families. This includes an unpublished genealogical manuscript, edited by Charles F. Dodge and his daughter, Catharine D. Angle.

Current insect nomenclature is consistent with Pelham (2008), Eades et al. (2012), and Gall & Hawks (2010). Information on the disposition of type specimens was obtained from Pelham (2008), Eades et al. (2012), online museum databases, and personal communications with museum staff.

#### RESULTS

**Early history.** Seven days after his 25th birthday, George Marshall Dodge shared aspects of his early life in a letter to 19 year old T. L. Mead (23.viii.1870 RC):

I was born of poor but honest parents in Augusta, Maine, A.D. 1846 in the month of August, the 16th day. In '47 we moved to Waldo County, Me [Maine], and in '54 moved to Illinois and established ourselves in the northern part of Bureau Co. where we still remain. We are farmers and I help 'carry on' the homestead and shall remain here a year or two longer. In the mean time I have preserved much of my youthful habits and appearance, and shall not write myself [a] man until I can produce a fair crop of whiskers. I have two brothers aged 17 and 8.

George's birthplace in Augusta, Maine was situated adjacent to a large home which was later purchased by the famous Maine legislator James G. Blaine (1830–1893) (Dodge & Angle [1926]). Since 1920 the Blaine house has served as the Maine Governor's residence.

Edgar Addison Dodge was born in Burnham, Waldo County, Maine on 11 April 1853. Charles Francis Dodge was born on 27 August 1862 in Bureau County, Illinois (Dodge & Angle [1926]). The father of the three brothers was George Addison Dodge (1819-1895), a farmer who also worked as a merchant tailor and later as a surveyor (Dodge & Angle [1926]). He served as a Selectman in the town of Burnham, Maine during the 1850s and represented Burnham in the 1854 Maine State Legislature (Dodge & Angle [1926], Sanborn 2012). The brothers' mother, Caroline Elizabeth Marshall (1819-1892), taught school in Maine for several years, an avocation shared by several other members of her family (Baldwin & Baldwin 1932, Dodge & Angle [1926]). As the eldest brother, George benefited from his mother's experience as an educator. George and Edgar also were skilled farmers, whereas Charles broke this tradition and pursued a career in business. Family and friends fondly referred to Edgar as "Ed" or "Eddy" and Charles as "Charlie". This branch of the Dodge family was descended from William Dodge, who arrived in Salem, Massachusetts in 1629 from Cheshire, England. He was a farmer who became very active in public affairs in Salem (J. Dodge 1894).

The Dodge brothers (Fig. 1) were distant cousins of two other entomologists. Charles Richards Dodge (1847-1918) was a researcher of plant fibers who published numerous articles and observations related to entomology. He served as an Assistant in Entomology under the first federal entomologist, Townend Glover, at the U.S. Department of Agriculture (Howard 1930). Frank Waldo Dodge (1875–1958) was a postal carrier in Melrose, Massachusetts who collected insects, especially aquatic beetles. He was very active in the Cambridge Entomological Club and served as its treasurer from 1913 to 1916 (Matthews 1974). Another entomologist, Harold Rodney Dodge (1913-1973), was possibly related to the brothers, but his family lineage is not well known. He was an economic entomologist who specialized in Diptera (Denmark 1973).

**Illinois.** In 1854, the Dodge family moved from Maine to Bureau County, Illinois. They lived temporarily with other former Maine residents, the

Havnes family (Dodge & Angle [1926]). Shortly after their arrival, Edgar and his father contracted Asiatic cholera, which killed the entire Havnes family within a short time. After a few days, Edgar was "left lying on a bed as dead" but later recovered. His father also recovered, but was too weak to work until at least November of that year and never fully regained his strength (Dodge & Angle [1926]). In December 1854, George A. Dodge purchased 32 ha (80 ac) of land for \$1,600, comprising the northeastern one-eighth of Section 19 of Ohio Township, Bureau County, Illinois (Warner & Beers 1875). Also purchased was 4.1 ha (10 ac) of woodland in an area known as "Heatoon's Grove" (Dodge & Angle [1926]). Their farm was located 3.2 km (2 mi) southwest of the town of Ohio, which was named after the state of Ohio (Callery 2009). Sewell C. Dodge, the brothers' uncle, later moved to Illinois and purchased 65 ha (160 ac) immediately to the north (Warner & Beers 1875; Dodge & Angle [1926]). The nearest railroad station was in the town of Princeton, 19 km (12 mi) to the south (17.xii.1870 RC). The family cultivated various crops (such as corn) and grew garden flowers from seeds sent by family members in Maine. They also raised cattle, chickens, and turkeys (Dodge & Angle [1926]). Following in his mother's footsteps, George M. Dodge passed the teacher's examination in 1868 and later worked as a teacher during the winter months, traversing bad roads to reach the school (Dodge & Angle [1926]; 17.xii.1870, 16.i.1872 RC).

George M. Dodge vividly recalled his life in Illinois. "When we first came here," he wrote, "wolves, rattlesnakes and deer were our nearest neighbors and called early and often. I have lain awake many a night listening to the howling Coyotes. Our nearest neighbor was a mile away then and thousands of acres of treeless prairie, unbroken by the plough, lay around us" (23.viii.1870 RC). As George grew older he no longer appreciated the isolation on the prairie: "I suppose it wouldn't seem so pleasant to me now. Man is a gregarious animal and I expect solitude isn't good for him" (ibid.). A portion of a letter from Caroline Dodge, describing fires on the Illinois prairies, was published in 1857 in the Piscataquis Observer, a Maine newspaper. When the Dodges first arrived in Illinois, Native Americans still lived in the vicinity, a fact that unnerved Caroline (Dodge & Angle [1926]).

In June of 1870, the young New York entomologist T. L. Mead wrote a letter to a potential correspondent by the name of "Marshall Dodge," asking if he wanted to exchange insects (16.vi.1870 RC). This of course was George M. Dodge, who responded that he collected "chiefly moths and butterflies with an occasional beetle" (28.vi.1870 RC). George admitted that his collection was "yet quite small," adding, "I am but a beginner and although an enthusiast in the pursuit of insects need information on almost every point connected with the 'business' if I may call it." He did not know the names of the local species, but was confident that he would "remedy that difficulty, if possible" (ibid.).

The Dodge brothers seriously began to study entomology during the summer of 1870, when George advised Mead, "You must excuse the meagerness of my collection on the grounds that as this is my first year in the business, I have but little more than got fairly initiated" (17.xii.1870 MGCL). George proposed to Mead that they "keep up a social correspondence on this theme and at the last of the season, having found what we lack, and the other one can supply, that we exchange" (28.vi.1870 MGCL). This would become the model by which he and his brother, Edgar, would exchange specimens with other entomologists for years to come. George recalled the "exclamations" expressed by his brothers when they received their first box of butterflies from Mead (23.viii.1870 RC).

Entomology had long been "a ruling passion," of the brothers, but they "never before attempted to become acquainted with the scientific names or to make a regular collection" (23.i.1871 RC). During their first year of their correspondence, Mead offered advice to George on how to properly mount specimens, fold specimen envelopes, and rear perfect specimens. Despite Mead's input, the brothers initially had trouble rearing some Lepidoptera (29.viii.1872 RC), a problem they quickly remedied. Mead also urged George to contact J. P. B. Henshaw, a Massachusetts naturalist who collected beetles. When George did not have time to personally collect Lepidoptera, his brothers would obtain the specimens and George would mount them in the evenings (20.v.1871 RC).

The friendship between George and Mead quickly grew. In May 1872, Mead took the train to Illinois and visited George for two weeks: "The Dodges welcomed me cordially & endeavor to make things as agreeable as possible." He described the family as "plain western farmer folk, keep no servants & eat in the kitchen, but they are well read & the boys are enthusiastic entomologists." Mead considered the brothers to be "quite expert to entomological matters" and he complimented George on his "fine collection" (6.v.1872, 13.vii.1873 RC). Mead encouraged the brothers to contact other entomologists and suggested that they send preserved butterfly eggs to the lepidopterist William H. Edwards, who was then completing the first volume of his seminal book The Butterflies of North America (Edwards 1868–1872) (28.v.1872, 28.ix.1873) RC). Edwards corresponded with the Dodges for many years and cited some of their observations in his publications.

Early on, George and Edgar were primarily interested in local butterflies, which they exchanged for colorful exotic species suitable for "exhibition" (5.iv.80 FMNH). Despite their desire for showy specimens, they did not ignore the smaller species, including skippers (Hesperiidae). Edgar collected some unfamiliar skippers in June of 1872, upon the "grassy slopes of the high rolling prairie that forms the divide between the Illinois and Rock Rivers." George soon after described them as a new species, Hesperia illinois (G. Dodge 1872c). This was George's first published description. "If every describer of a new species would do it as clearly and distinctly as you have done," Mead told Dodge, "the Halcyon days of entomology would commenced" have fairly (22.xii.1872 RC). Unfortunately, George quickly discovered that this new skipper was described a few years earlier as Hesperia acanootus Scudder, which in turn was a synonym of Hesperia bimacula Grote & Robinson (= Euphyes *bimacula*) (Calhoun in press). Dodge (1873) published a retraction, blaming himself for re-describing a known species "with injudicious haste." Two weeks after Edgar discovered *E. bimacula* in Bureau County, the brothers found the Poweshiek skipper (Oarisma poweshiek (Parker)) abundantly at the same locality (Dodge 1872c). Their few surviving specimens of O. poweshiek remain the only known examples of this rare species from Illinois (Bouseman et al. 2006).

During the early 1870s, George began rearing Lepidoptera and published some of his observations (G. Dodge 1870, 1872b). The brothers also became very interested in moths of the genus *Catocala* (Noctuidae). In addition to Lepidoptera, George was curious about a wide variety of insects and arthropods, even mites (G. Dodge 1872a). He was fond of grasshoppers and was "considerably interested" in Coleoptera. He started exchanging beetles with J. P. B. Henshaw and had numerous species in his collection (10.iii.1873 MCZ). Although George sometimes claimed that he "never could get up much enthusiasm" over beetles (14.xi.1875 RC), he continued to collect them for many years, especially those of the family Cicindelidae (Van Duzee 1926). He wished to someday visit the Rocky Mountains of Colorado, Montana and Wyoming. "I had much rather take a trip through them than go sightseeing in Europe," he wrote (26.vi.1871 RC). He presumed that the Rockies would hold "quite as much enchantment" as the Alps.

**Nebraska.** In 1869, the brother's father, George A. Dodge, purchased property near Glencoe, Dodge County, Nebraska (Dodge and Angle [1926]). During

the autumn of 1871, George M. Dodge traveled to Nebraska where he bought land in the same area (26.vi.1871 RC). On a later map of Dodge County (Olge & Co. 1902), his property is shown as comprising the entire northern half of Section 3 of Pleasant Valley Township. It encompassed over 127 ha (314 ac) and was situated between present-day County Roads 6 and 8, south of State Road 91. Almost the entire town of Snyder is now located within a small portion of George's property. It is unclear, however, if George acquired a separate parcel or simply added to the property owned by his father. He described his land as consisting of "some very pretty high rolling prairie," which was "better adapted to farming than the rolling prairies of Illinois and Iowa" (26.vi.1871 RC). In early 1873, George spent time at Glencoe in anticipation of the family relocating to the area. They moved on the first day of August that year, riding the train to North Bend, Nebraska, and completing the journey by farm wagon (G. Dodge 1882a, 1882b, Dodge & Angle [1926]). "I have not got into my own house yet but we will soon begin to build," George wrote shortly after their arrival (17.viii.1873 MCZ). Burdened with farm chores in Nebraska, George especially disliked harvesting corn, an occupation he described as "practical on paper but is really eminently prosaic" (14.xi.1875 RC). Charles later surmised that if the family had not moved to Nebraska, all three brothers would have been consigned to tenant farming in Illinois for the rest of their lives (Dodge & Angle [1926]).

Dodge County, Nebraska was named in honor of Augustus Caesar Dodge (1812–1883), a United States Senator from Iowa who was descended from a different branch of the Dodge family. Glencoe was situated about 6.4 km (4 mi) southeast of the town of Dodge and 22.5 km (14 mi) north of the Union Pacific railroad line (2.i.1888 BMS). The town of Dodge first appeared on maps during the mid-1880s and took its name from George A. Dodge, a prominent local citizen and father of Charles, Edgar, and George (Fairclough 1960).

Edgar married his first cousin, Ida May Dodge (1865–1953), on 4 July 1885. Possibly during this time, Edgar purchased three parcels of land totaling nearly 162 ha (400 ac) in Sections 1, 2, and 11 of Pleasant Valley Township, Dodge County, between present-day County Roads 8 and 12 (Ogle & Co. 1902). Like his father had done in Maine, George became active in state politics and society affairs. He served on the 1879 Nebraska State Legislature and on the advisory board of the Nebraska State Horticultural Society during the 1880s (Barnard & Allen 1887, G. Brown 1879).

After moving to Nebraska, George spent a great deal of time studying the migratory habits of the now-extinct

Rocky Mountain Locust (Melanoplus spretus (Walsh)) (G. Dodge 1875b). Acknowledging that he gave more attention to this species than to "all other insects put together" (Packard 1877), George unwittingly documented the last major swarms of the species. Undaunted by his earlier misadventure with *H. illinois*, George described Hesperia pawnee, which he found "upon the rolling prairie" around Glencoe (G. Dodge 1874a). "I'm afraid you won't think it a very pretty name," George explained to Mead, "but I gave it on account of the region having been the old hunting ground of the Pawnee Indians, who still are seen at times along the line of the U. P. [Union Pacific R.R.] in this county" (9.iv.1874 RC). George described *pawnee* only after consulting with the New Hampshire naturalist Charles P. Whitney (1838–1928), who took specimens to Boston in order to compare them with skippers in the collection of S. H. Scudder (26.xii.1873 RC). Though George had little faith that *pawnee* was new to science, Scudder "pronounced it a new species" (9.xii.1873 RC). In jest, or as an act of outright extortion, Scudder agreed not to publish his own description of the species if George sent him duplicate specimens (23.iv.1874 BMS). At least one of the specimens that Scudder received from Dodge in April 1874 is preserved at MCZ (see Type Specimens below). Today, *pawnee* is recognized as a subspecies of Hesperia leonardus Harris.

George and Edgar often wrote to their correspondents about the Lepidoptera of Illinois and Nebraska, thus many of their observations were subsequently published (e.g. Packard 1876, Edwards 1880, 1887-1897, Scudder 1888-1889, Forbes 1889, Taylor 1889). They continued to cultivate their interest in Catocala moths, rearing larvae and employing sugar baits to attract adults (G. Dodge 1874b; 28.iv.1880, 8.x.1881 FMNH). Based on specimens collected by the brothers in Illinois and Nebraska, George described Catocala whitneyi, C. nebraskae, and C. nebraskae form somnus (G. Dodge 1874c, 1875a, 1881). "I take great interest in Catocalas," George wrote in 1875, "and shall always be on the alert to exchange for new species in that genus" (14.xi.1875 RC). He publicized his desire to provide insects of any order in exchange for Catocala and other species of Lepidoptera. Edgar, on the other hand, still preferred butterflies (Cassino 1877).

In addition to Lepidoptera, George described nine taxa of grasshoppers that he found in Dodge County, Nebraska and published remarks about several other species (G. Dodge 1876a, 1876b, 1877, 1878). He also became interested in flies, particularly horseflies (Diptera, Tabanidae), and his specimens from Nebraska resulted in the description of *Tabanus dodgei* (= *Anacimas dodgei*) by C. P. Whitney, in whose honor George had previously described *Catocala whitneyi*. It should be noted that Charles Richards Dodge collected insects in Nebraska during the 1870s, hence a few literature references cite specimens from "Mr. Dodge" (e.g. Thomas 1876) that do not pertain to the Dodge brothers.

By the year 1880, extreme weather in the Midwest had impacted the insect fauna of Nebraska. George remarked that during the previous seven years Lepidoptera "fairly swarmed," but they had become more scarce each year: "now it barely pays to collect at all" (15.x.[1880] FMNH). Possibly compelled to find new fields to explore, George traveled that summer on the Union Pacific railway line as far west as Ogden, Utah, evidently collecting some insects along the way (2.i.1888 BMS). Meanwhile, Edgar wrote of his desire to spend three months collecting insects in the Black Hills of South Dakota, with the hope of selling the specimens "very cheap" (i.1880 BMS, i.1880 FMNH). Not able to make this trip, he lamented, "I feel pretty blue about it as I had hoped to get many rare specimens in that vicinity" (29.vi.1880 FMNH).

In 1881, the imported cabbage butterfly, *Pieris rapae* (L), made its first appearance around Glencoe, when Edgar observed, "I caught one early this spring, the first living ex[ample] I ever saw." Only a few months later, he mentioned that local gardens were "covered with the butterflies" (22.x.1881 FMNH). George later published some observations of this species (G. Dodge 1882a, 1882b). Scudder (1888–1889) cited the abundance of *P. rapae* in Fremont, Nebraska in 1881, which included one of the only known published references to Charles F. Dodge in an entomological context. Scudder did not correspond directly with Charles, however, but received this information from George (2.i.1888 BMS).

During the 1880s, Edgar continued to collect Lepidoptera and Coleoptera, and also developed an interest in apiculture (E. Dodge 1888). He sold "a good many" more insect specimens than he exchanged (ii.1882 FMNH). In July 1882, Edgar traveled to Colorado, where he collected insects primarily in the vicinities of Boulder, Idaho Springs, and Manitou. He also collected on Pike's Peak. He boasted that he returned with as many as 900 specimens of butterflies, hoping to "sell enough to partly cover expenses of the trip" (17.i.1883 FMNH). Later that year, Edgar and other family members nursed George through a serious illness (ibid.).

The brothers became acquainted with several influential entomologists during this period. In August 1884, Charles V. Riley, then serving as entomologist to the U.S. Department of Agriculture, visited George at Glencoe and discussed the extensive damage in the region caused by the elm sawfly (*Cimbex americana* Leach; Hymenoptera) (Riley 1884). Edgar met Lawrence Bruner, who later became a professor at the University of Nebraska. Edgar later recalled that he and Bruner "used to collect together sometimes" (20.vi.[1919] CAS).

Probably to attend school, Charles moved as a youth to the larger town of Fremont, the county seat of Dodge County, where he boarded with the family of George Stanley. Charles was described in 1887 as "a boon chum" and a "right jolly good boy" (Hayes 2002). About the year 1890, Charles was photographed as a rising young businessman (Fig. 2). That year, Charles apparently took a trip to Florida and was on board a steamer ship that burned on its way down the St. Johns River en route to the city of Sanford, killing four passengers on board (Anonymous 1890). On 10 May 1893, he married Eva Clarendon (1869–1929), with whom he had four children; Catharine (often misspelled "Catherine") Elizabeth Dodge (1896–1973), Margaret Dodge (1898–1919), and Caroline Dodge (1908–1957), as well as an infant who died shortly after birth in 1894. Charles was an avid reader and often read to his family in the evenings; his favorite book was Don Quixote. From the 1880s through the early 1900s, he worked in real estate and insurance and was a cashier at the Farmers' and Merchants' National Bank in Freemont, where he later rose to the position of President (Anonymous 1913, Buss & Osterman 1921, Baldwin & Baldwin 1932). Among the bank's first board of directors in 1884 was Charles' father, George A. Dodge (Buss & Osterman 1921). Charles was elected in 1914 as the President of the Security Savings Bank in Fremont and served for many years as the President of the affiliated Fremont National Bank (Anonymous 1914; Buss & Osterman 1921). He was a member of the Society of the Sons of the American Revolution and his home, located at 1219 Park Avenue in Fremont, was figured by Lucas ([1914]). In addition to his home in Fremont, Charles owned nearly 129 ha (318 ac) of land, comprising the entire western half of Section 1 of Pleasant Valley Township, Dodge County, Nebraska (Ogle & Co. 1902). This property abutted two of Edgar's properties and was near the large parcel owned by George. Two years after the death of his wife Eva, Charles married Nona S. Turner (1877–1959) (Baldwin & Baldwin 1932). He died as a respected member of the Fremont community on 20 November 1936 at the age of 74 and was buried in Ridge Cemetery in Fremont. Although Charles appears to have studied insects into the early 20th century (Barnes & McDunnough 1918b), his interest evidently waned later in life. His insect collection, in two large cabinets, was

inherited by his oldest daughter Catharine. Decimated by insect pests by the time of her death in 1973, the collection was discarded.

**Missouri.** In late 1888 or early 1889, the Dodge family (except for Charles) moved to Louisiana, Pike Co., Missouri, a town named after an early resident of the region (Williams 1913). That portion of Missouri invoked memories of their home back in Maine (Dodge & Angle [1926]). During this period, Edgar and his wife had two children, Ralph Edgar Dodge (1892–1925) and Alice May Dodge (1896–1989). In 1892, the three brothers gathered in Freemont, Nebraska for a cabinet card portrait (Fig. 1), which portrays George at the age of 46, Edgar at 39 and Charles at 30.

The brothers' parents died within five years of their arrival in Missouri. Edgar and his family continued to live with George, who owned 110 ha (272 ac) of land on the southeast side of town, about 0.40 km (0.25 mi) south of the present-day intersection of S. 30th Street and Noix Creek (Ogle & Co. 1899). Edgar owned 4.9 ha (12 ac) just west across the road from George's large property. In 1901, Edgar and his family (minus Ralph) posed for family portrait (Fig. 3). Edgar was 48 years of age.

For some time after arriving in Missouri, George had little time for natural history studies (10.xii.1892 BMS). Toward the end of the century, he and Edgar became increasingly busy with farming, including owning and operating the Hillview Poultry Farm, specializing in breeding barred Plymouth Rock chickens (11.ii.1900). After a number of years of entomological inactivity, George and Edgar resumed collecting in 1899. Confirming that their interest was "again aroused" ([1900] FMNH), this inaugurated another productive phase for the two brothers, who continued studying Catocala moths and published several papers on the subject (G. Dodge 1900a, Dodge & Dodge 1904). They reared many species of Catocala and George advertised eggs for sale and exchange. George described Catocala *titania* from specimens which he and Edgar collected at Louisiana, Missouri in 1899 (G. Dodge 1900b). This pursuit of *Catocala* probably was reinforced by the enthusiastic Missouri collector Robert R. Rowley (1854–1935), a teacher and paleontologist who lived in the same town (Meiners 1949). Rowley (1908a, 1909) and Rowley & Berry (1910, 1913, 1914) included many of the Dodge's observations of Catocala. Rowley (1908b) also described a Paleozoic crinoid (Platycrinus *dodgei*) and a Paleozoic brachiopod (*Crania dodgei*) in honor of Edgar, his "valued friend and co-worker."

With Edgar's assistance, George continued to study flies and publish notes on various species (G. Dodge

1893, 1899). By this time, George's natural history pursuits had expanded even to include nematodes (G. Dodge 1890). He continued to collect grasshoppers, admitting in 1892, "I have by no means lost interest in that family" (10.xii.1892 BMS). During the spring of 1902, George traveled to Texas and collected insects around the towns of Higgins, Ingram, Kerrville, and Llano. Fulfilling a lifelong dream, he also visited Colorado during June and July of that year, where he collected insects at several locations, including Denver, South Park, and Mt. Audubon. Specimens collected by Edgar and George in Colorado and Missouri contributed to the descriptions of several new fly taxa by Whitney (1904).

Never having lost his fundamental interest in butterflies, George published notes on the hoary edge skipper (*Achalarus lyciades* (Geyer)) and described a form of the American painted lady (*Vanessa virginiensis* (Drury)) from one of his own specimens (G. Dodge 1898, 1900c). He also described the skipper *Nisoniades llano* (=*Gesta invisus* (Butler & Druce)) from a specimen he collected in Llano County, Texas (G. Dodge 1903). This was the last taxon that George described during his lifetime.

California. During the first few years of the 20th century, the soil which Edgar and George had long cultivated in Missouri became unworkable "solid Portland cement" (Dodge & Angle [1926]). They decided to retire in 1909 and relocate to Santa Cruz, California. Stories about their uncle, William Dodge, who had previously lived in California, possibly prompted this decision. Edgar first lived at 552 Bay Street, but he soon moved to 546 Bay Street, into a house built in 1888 on several hectares of land at the northeast corner of Bay and King Streets (the house still stands, now as 1512 Bay St.). Calling it his "farm," he resided on this property for the remainder of his life, though he later sold off a portion (28.viii.1925 CAS). He continued his entomological studies, including rearing Lepidoptera and illustrating early stages. He kept his insect collection in a building that had previously been used as a barn (v.1919 CAS). A very talented artist, Edgar sometimes sent life-sized sketches of his captures to other entomologist for identification (ii.1882 FNMH). Two of his drawings were published by Hiser & Hiser (1918).

George never married. Although the 1910 federal census listed him as a real estate agent in Santa Cruz, his voter registration that year indicated that he was retired, which is consistent with family history (Dodge & Angle [1926]). He lived at 164 Wilkes Circle, less than a mile from Edgar, where he had a German boarder by the name of Constantine Boettger. It does not appear that George was entomologically active after moving to California, possibly because of declining health. A worn photograph of George in California is preserved at CAS (Fig. 4). Inscribed, "George M. Dodge, Santa Cruz, Cal 1910," it portrays the intrepid naturalist at the age of 64. He died two years later in Santa Cruz on 25 February 1912 and was buried at Odd Fellows Cemetery (currently Oakwood Memorial Park) in that city. Edgar later donated George's collections of 165 horseflies and 478 cicindelid beetles to CAS (Van Duzee 1919, 1926). The former were largely collected "in the days when eastern Nebraska and Kansas was mostly virgin prairie" (13.viii.[1925] CAS). George's Lepidoptera specimens were retained by Edgar.

Edgar often collected insects in the vicinity of his home, where he discovered a new skipper which Bell (1927) described as Pamphila juba race dodgei (now recognized as Hesperia columbia dodgei). He and another collector, John P. Strohbeen, first encountered these skippers in 1926 within vacant lots around the King Street section of Santa Cruz, an area now heavily developed. Not surprisingly, that population was extirpated by 1950 (Martin 1950). An article about the discovery of this skipper appeared in the local Santa Cruz newspaper, in which it was announced, "It is with great pleasure that this new race of butterflies is named for E. A. Dodge, who with Mr. Strohbeen spend their leisure time in gathering all forms of insect life" (Anonymous 1927). During the early 1920s, Edgar was still defending his late brother's description of H. *pawnee* as a species separate from Hesperia ottoe W. H. Edwards (12.i.1921 CAS). Despite his best efforts, Barnes & Benjamin (1926) and other authors considered them to be synonymous. George and Edgar were ultimately vindicated, as *pawnee* and *ottoe* are now recognized as members of distinct species.

In addition to Hesperiidae, Edgar became "quite interested" in geometrid moths ([x.1919] CAS), though his curiosity in this group wavered over the years: "I have never been much interested in these as I liked the Noct [Noctuidae] better" (28.vii.1926 NAKC). He eventually grew frustrated with the many varieties of moths that he found. "I have about concluded that a collection of moths is [too] much for me," Edgar confessed, adding, "I may have to let some other fellow attend to things in that line" (27.?.[1922] CAS). Despite his waning interest in other types of moths, his obsession with Catocala remained strong. He argued that if he knew anything, "it is the Catocalae" (8.ix.1920) CAS). He published short notes about *Catocala* that he and George had previously found in Nebraska and Missouri (E. Dodge 1919, 1925). In 1914, Edgar visited

Nebraska where he collected *Catocala* with his old friends (E. Dodge 1919). Edgar continued to collect other California insects, including Hymenoptera and Diptera, and his specimens were mentioned by a numerous authors (e.g. Malloch 1914, Van Duzee 1926, Middlekauff 1950, 1960, Hurd 1955, Alexander 1967, Perkins 1973, MacNiell 1964). So many specimens of the Dodge's were in circulation by the 1920s that the Illinois Lepidopterist William Barnes obtained some through secondary sources (10.vi.1926 NAKC).

During the 1920s, Edgar desired to sell most of his remaining land in Pleasant Township, Dodge County, Nebraska. He accomplished this with the help of his brother Charles and Herman H. Holsten, a fellow bank president who owned several properties around the town of Dodge (Dodge & Angle [1926]). Plat maps of Dodge County indicate that Edgar retained ownership of 65 ha (160 ac), which transferred to his wife, Ida, after his death. Ida had family in Nebraska and this connection probably convinced Edgar to retain land there.

Through Barton W. Everman, then Director of CAS, Edgar became acquainted in 1919 with E. P. Van Duzee, an entomologist who had recently become the curator of the museum (10.i.1919, 20.vi.[1919] CAS). Edgar and Van Duzee quickly developed a close friendship. Not long after becoming acquainted with Van Duzee, Edgar wrote, "I should not be surprised if the museum did not fall heir to my collection some day when I am through with them" (19.iv.1919 CAS). Beginning in 1919, Edgar donated batches of his specimens to CAS. For many years, Edgar and Van Duzee corresponded, visited one another, and collected insects together. Edgar reassured Van Duzee that he was "always glad to have a fellow collector to hunt with" (16.vi.1919 CAS). Following one early collecting trip with Van Duzee, Edgar contracted a severe illness, possibly a reaction to poison oak, which temporarily affected his eyesight (ibid.). Unable to afford his own copy of The Moth Book (Holland 1903), Edgar repeatedly borrowed a copy from Van Duzee, who was never inconvenienced to help his friend, mailing it back and forth without complaint.

Edgar was an expert naturalist, but he did not care for fishing. An unpleasant fishing trip with his son forever turned him against this leisurely pursuit. Ralph was an expert fisherman and thought his father would enjoy an outing. "About the first thing I was foolish enough to do was to fall in the creek," Edgar wrote. "I started back to the car for any clothes and got lost in the chaparral and wandered about for thirty six hours before I found a friendly Italian and got back to civilization." This effectively resolved Edgar's dilemma: "Ralph has said nothing since about making a fisherman of Dad" ([v.1919] CAS).

In 1922, Edgar suffered "something in the nature of a stroke." As a result, he did not recognize his family and could "walk but little" (14.vii.[1922] CAS). He also "got moths and everything else badly mixed," thus he temporarily quit working with insects until his health improved ([v.1926] NAKC). In 1930, he complained that he had "serious heart trouble" and his doctor advised him to discontinue collecting insects or climbing the stairs to his "bug house". Refusing to stifle his passion, Edgar declared, "I shall however continue to climb the stairs and if it kills me I shall die in a good cause" (6.v.1930 CAS). Edgar died three years later on 22 March 1933 at the age of 79 and was buried at Odd Fellows Cemetery (currently Santa Cruz Memorial Park) in Santa Cruz.

As he had proposed many years earlier, Edgar bequeathed his remaining insects to CAS. Three days after Edgar's death, Van Duzee contacted Ida Dodge to arrange for the transport of her husband's collection. "I will run down there at any time with one days notice and attend to packing up the specimens," he assured Ida. Grateful for the gift, Van Duzee added, "It certainly was very kind and thoughtful in Mr. Dodge to wish his material placed in this collection but I am sure there is not a place where they would be of so much service to future entomologists as they will be here" (25.iii.1933 CAS). Accession records at CAS indicate that over 7,600 specimens, mostly Lepidoptera, were ultimately obtained from Edgar. The Dodge's employed distinctive triangular labels (Fig. 6, bottom), which are helpful in recognizing Dodge specimens at CAS. These large labels were often replaced by others who obtained their specimens. For example, those from the C. P. Whitney collection at the Peabody Museum of Natural History (Yale University, New Connecticut; PMNH) Haven, bear smaller replacement labels in Whitney's hand (Fig. 6, top).

In the CAS archives is a 100-page "Day Book" ledger that evidently accompanied the transfer of Edgar's insect collection to the museum after his death in 1933. Written in pencil in Edgar's hand is the inscription, "List of the collection of G. M. and E. A. Dodge, with notes, names of the food plants, where from localities, etc. – from 1869 – to – 1916," to which is added, "Continued by E. A. Dodge to 1930." Another notation reads, "This book should go with the collection. Contains lists of all insects in the collection." This ledger consists primarily of a list of Lepidoptera species with running tallies that record the number of specimens in their collection and brief references to localities (e.g. "Ill." and "Neb."). Species collected by

the Dodge's are often accompanied by "G. M. Dodge," "E. A. Dodge," or simply "Dodge." Hostplants are listed for many species, especially Catocala moths, many of which were "bred by Dodge." This catalog follows the arrangement and nomenclature of the Check List of the Lepidoptera of Boreal America by Barnes & McDunnough (1917). Because George died prior to the publication of this checklist, Edgar is entirely responsible for the creation of the catalog, which he probably began during the 1920s. Tipped into the ledger are a few photographs and several original letters, mostly regarding taxa named in honor of Edgar. Also included is a list by Edgar of the butterflies that he collected in Santa Cruz and a tally of the specimens in the collection of J. P. Strohbeen. Unfortunately, there are no records of who received their specimens via exchange or sale. Names of other collectors appear next to some entries, presumably identifying the sources of those specimens. Because George's specimens were clearly combined with those of Edgar, it is likely that some published references to Edgar's specimens at CAS (e.g. MacNeill 1964) are attributable to George. Many unattributed specimens listed by Burns (1964) from Nebraska, Missouri and California were undoubtedly collected by both Edgar and George.

In addition to specimens from George, some of the insects donated by Edgar to CAS were collected by Edgar's son, Ralph E. Dodge. Born in Louisiana, Missouri on 13 April 1892, Ralph shared his father's interest in insects. His moth collecting activities were mentioned by Rowley (1908a, 1909) and personal advertisements indicate that Ralph also collected bird eggs, Native American artifacts, shells, and stamps. He supposedly had one of the largest private collections of Native American artifacts in California ([x.1919] CAS) and some of his objects were listed by Moorehead (1917). Ralph published a few natural history notes in various journals and bulletins (e.g. R. Dodge 1914a, 1914b).

Around 1912, Ralph briefly relocated to Nickerson, Dodge County, Nebraska, where he collected *Catocala* moths (Rowley & Berry 1913). Probably in 1915, the year he joined the Cooper Ornithological Club (Hollywood, California), Ralph returned to Santa Cruz. He briefly worked in banking before becoming an automobile garage owner. In 1917, he described himself on his military draft registration as "physically able," tall and slender, with brown hair and brown eyes. He enlisted in the army the following year with the expectation of serving in the First World War: "I look forward to taking up my relic collecting with a great deal of pleasure as soon as the war is over" (Anonymous 1918). He served in France during the last part of the war. A photograph of Ralph, taken in New York upon his return from Europe in 1919, portrays a war-weary doughboy at the age of 27 (Fig. 5).

After the war, Ralph co-owned an automobile garage and dealership, selling Hupmobile, Marmon, and Nash models. He remained active in natural history and presented a paper on the birds that he had observed in France during the war (Chambers 1919). He and his father continued to sugar for moths in the vicinity of Santa Cruz (14.x.1920 CAS). In 1922 Ralph moved to Exeter, Tulare County, California, where he bought an "orange orchard" and also grew olives (vi.1922, 8.xi.1922 CAS). For several months he lived alone on his property along Rural Delivery 9 (Box 468). Assuming this solitude would be short-lived, Edgar predicted, "I have an idea he expects to export one of the Santa Cruz maidens before many days to help him out on his ranch" (27.[vii].1922 CAS). Only two months later, on 10 September 1922, Ralph married Cordelia M. Blewett (1891-1941), an accountant from Santa Cruz. They had one child, Marshall Blewett Dodge (1923–1945). Ralph collected moths in the vicinity of his ranch in the San Joaquin Valley and sent many of the specimens to his father. In 1922, Ralph traveled to San Francisco where he met E. P. Van Duzee (17.ix.1922 CAS).

In early May 1925, Ralph lacerated his toe while working on his tractor and developed "blood poisoning" (presumably septicemia). He visited his parents in Santa Cruz a few days after the accident, but his condition worsened and he did not recover (13.viii.[1925] CAS). Tragically, he died in a Santa Cruz hospital on 14 May 1925 at the age of 33. He was buried at Odd Fellows Cemetery (currently Santa Cruz Memorial Park) in Santa Cruz, where his father would be interred less than a decade later. Referring to Ralph's last entomological project, Edgar wrote, "He was interested in the moths and at the time of his death he was making a local collection at Exeter for a farm advisor or fruit specialist for the valley" (ibid.).

Not only did Edgar suffer the loss of a son, he also lost a collecting companion and entomological heir. "If Ralph had lived he would have taken over my collection," he remarked (2.vi.1926 NAKC). Van Duzee (1925) announced Ralph's death in a brief notice, in which he lamented, "Our Western entomologists will feel that their branch of science has sustained a serious loss in the death of young Mr. Dodge." The following year, Edgar donated 211 moths to CAS that Ralph had collected in Exeter (Van Duzee 1926). Ralph's Native American artifacts were loaned to the "Los Angeles Park Museum" (now the Natural History Museum of Los Angeles County; Los Angeles, California; LACM). It was hoped that Ralph's son, Marshall, would someday "want to carry on this line of work" (13.viii.[1925] CAS, 2.vi.1926 NAKC), but Marshall was later found to suffer from mental disabilities and reportedly committed suicide in 1945 at the age of 22. Ralph's artifact collection was acquired in 1930 by the amateur archaeologist Harry H. Bergman, who in 1920 had married Ralph's sister, Alice. Ralph's artifacts formed the basis of Bergman's Museum of Natural History, which opened to the public in 1930 near Aguanga, California. The museum was closed in 1993 and its collections sold. Many of Ralph's artifacts were available for sale on the Internet just a few years ago. Bergman's museum reportedly also possessed a collection of butterflies and moths (Karr 1968), perhaps including old specimens from Ralph and his father, Edgar.

Edgar's daughter, Alice, undoubtedly also enjoyed an appreciation of insects. Hoping to "find out something" about them," she sent Edgar some hemipteran specimens which she had found in the vicinity of her home in the Imperial Valley of California, (vi.1922 CAS). Edgar collected Lepidoptera during his visits to her ranch in Riverside County (14.vii.[1922] CAS). In 1926, Alice joined her parents and the Strohbeens on an insect collecting trip to Truckee and Lake Tahoe, California (2.vii.1926 NAKC). Fond of painting water color portraits of flowers, Alice's interest in natural history is also indicated by her marriage to H. H. Bergman, who claimed that she accompanied him on all of his collecting expeditions (Karr 1968). She died on 3 July 1989 at the age of 93 and was buried in Radec Cemetery, Radec, California.

John P. Strohbeen. Edgar's field companion in California, John P. Strohbeen, also had broad interests in natural history, especially entomology, conchology, and botany. In his later years, Edgar collaborated with Strohbeen in the study of the Lepidoptera of Santa Cruz County (E. Dodge 1920, Van Duzee 1933). As Edgar aged, Strohbeen's assistance became more valuable. Being the younger of the two, Strohbeen did most of the collecting, while Edgar mounted the specimens ([v.1926] NAKC). Little has been published about Strohbeen, thus I take this opportunity to more fully introduce him to the entomological community. The following account is taken from a variety of public records and a brief biographical memo preserved in the archives of the Museum of Art and History in Santa Cruz.

The eldest of seven children, John Peter Strohbeen (Fig. 7) was born on 18 April 1884 in Remsen, Iowa, where he worked as a dry goods clerk during his teens. In 1904, he moved to Santa Cruz, California, where he

was employed as a grocery clerk, then as a clerk and driver for the dry goods retailer Bias & Company. In 1913 he married Carolyn Hertz (1887–1973), a department store clerk. Five years later, Strohbeen went to work for the Pacific Telephone and Telegraph Company as a repairman, electrician, and installer. In 1918, he described himself on his military draft card as 1.8 m (6 ft.) in height, medium build, with gray eyes and blond hair. He worked for P.T. & T. until his retirement in 1946, after which he was able to commit more time to his natural history studies. He was a prolific collector and traveled throughout much of California in search of specimens. Edgar referred to Strohbeen's zealous field methods as "wholesale collecting" (2.xi.1919 CAS). Strohbeen yearned to take a trip to South America in search of Morpho butterflies ("these big ones look good to John"), but I have found no evidence that he ever took such a trip. Strohbeen sometimes worked with other naturalists on various projects outside entomology (e.g. Sorenson et al. 1955). As with Edgar Dodge, Strohbeen was an early source of encouragement to the California lepidopterist J. W. Tilden (Smith 1990).

During a collecting trip in Santa Cruz in 1923, Strohbeen collected some butterfly specimens which he sent to Edgar. Many years later, Edgar forwarded a few to the San Francisco entomologist Robert F. Sternitzky, who described them as a new subspecies, *Parnassius clodius strohbeeni* (Sternitzky 1945). Coincidentally, Gunder (1932) previously described an aberration of this taxon as *dodgei* in honor of Strohbeen's old friend, Edgar Dodge. Regrettably, *P. c. strohbeeni* was last seen in 1958 and is believed to be extinct (Garth & Tilden 1986).

Shortly after the death of Edgar in 1933, Strohbeen and his wife moved to 315 King Street, a few doors down from the new residence of Edgar's widow, Ida. Some years later, Strohbeen purchased all but a small portion of Edgar's remaining land in Santa Cruz. He moved onto this property around 1945 and resided there for the next thirty years at 1135 King Street. He died at the age of 92 on 10 August 1976 at a convalescent hospital in Arroyo Grande, California, and was buried at Santa Cruz Memorial Park in Santa Cruz. His natural history specimens are deposited in various museums, including CAS, LACM, the National Museum of Natural History (Washington, D.C.; USNM), and the Santa Cruz Museum of Natural History (Santa Cruz, California). His collection of photographs of the 1906 San Francisco earthquake and fire are preserved by the California Historical Society.

**Type specimens.** Some of G. M. Dodge's type specimens were destroyed in a fire around 1905. Based

on information from Edgar, Beutenmüller (1907, 1908) stated that the types of Catocala whitneyi were destroyed by fire and that all but one specimen from the type series of C. titania met the same fate. Referring to the types of *titania*, Edgar indicated in his ledger that this taxon was described from an adult specimen which had been reared from a larva "beaten from young trees." He also stated that two other specimens of *titania* were taken that season "and about 25 more the next season," all of which were lost in the fire. In 1914, Edgar recalled, "The types of Nebraskae and Whitneyi also Somnus were destroyed by fire a number of years ago" (14.xi.1914 NAKC). The brothers evidently sent a few syntypes to correspondents before the fire. A surviving name-bearing type of *titania*, for many years in the possession of William Barnes and figured in Barnes & McDunnough (1918a), was designated as lectotype by Gall & Hawks (2010). Leussler (1921) claimed that a "type" of Hesperia pawnee also was lost in a fire, but this contradicts the comments of Edgar, who claimed that only a box of Catocala had burned, but it "unfortunately contained all our types" (29.xii.1920 CAS).

George and Edgar sold and exchanged many specimens, including those they considered to represent "types" (see G. Dodge 1872c). In addition, their use of the term "type" was loosely defined and included specimens of "typical" appearance. It is therefore important to scrutinize some alleged "types" that are currently preserved in museums. For example, Van Duzee (1919) stated that Edgar had donated male and female specimens of *H. pawnee* to CAS, both of which he identified as "the types" from Nebraska. These specimens, however, are similarly labeled and the female was collected in 1880 (Fig. 6, bottom); much too late to be included in the type series of a taxon described in 1874. This discrepancy was later noted by E. P. Van Duzee, who ultimately dismissed them as primary types. In a letter to Edgar, Van Duzee asserted that they "evidently are topotypes having been taken at the same locality." He recalled that Edgar previously indicated that the specimens were "from a series carefully compared with the type" by Edgar and George, "so there could be little if any chance of their not belonging to this species" (25.i.1921 CAS). Despite the date on the female, CAS considers both specimens to represent syntypes (CAS 2012). Presumably valid syntypes of *H. pawnee* are deposited in the Carnegie Museum of Natural History (Pittsburg, Pennsylvania; CMNH), MCZ, and PMNH. Male and female "paratypes" of *pawnee* were figured by Holland (1931, Pl. 52, figs. 30, 31) from specimens in CMNH, but only the male is from Nebraska (where the entire type series

originated). The female was collected in Montana.

A "type" of *C. whitneyi*, labeled 11 July with no locality, is deposited in CAS, but all *Catocala* types in the possession of the Dodge brothers were supposedly destroyed by fire before they moved to California. Because the type series of *whitneyi* was from Illinois, but George lived in Nebraska when he described this species, the "type" in CAS most likely was collected in Nebraska and does not represent a name-bearing type. Another alleged "type" of whitneyi is deposited in The Natural History Museum, London (BMNH) (Metzler 1987), but George informed William Beutenmüller that this specimen (ex. A. R. Grote collection) was not from the type series (Beutenmüller 1907).

Although some of George's type specimens are lost, others are merely misplaced, unrecognized, or overlooked. For example, Pelham (2008) stated that the holotype of Nisoniades llano was lost in the San Francisco fire of 1906, yet that event took place three years before George and Edgar moved to California. This holotype, collected by George in Llano, Texas on 17 April 1902, was found in the CAS general collection. Likewise, the whereabouts of the holotype of *Pyrameis* huntera var. fulvia was unknown for many years (Pelham 2008). It was figured by John A. Comstock (1927), whose collection is deposited in LACM. A brief search of that collection revealed that Comstock had retained the specimen. Although Gatrelle (1999) designated a neotype for *Hesperia Illinois* Dodge, at least three syntypes were found to exist in the American Museum of Natural History (New York, New York; AMNH), The Academy of Natural Sciences (Philadelphia, Pennsylvania; ANSP) (see F. Brown 1974), and PMNH. Other Dodge type specimens surely await discovery.

Many of the Dodge's specimens serve as namebearing types of insects that were described by other authors. A few of these, however, are routinely overlooked because of misunderstandings about their origin. McDunnough (1950) dismissed a purported type of the moth Agrotis personata Morrison (=Euxoa detersa (Walker); Noctuidae), which was collected by George Dodge in Illinois, because it is labeled "Ohio." McDunnough apparently was unaware that George lived and collected around the town of Ohio, Illinois. Some types were received from other collectors, but were wrongly credited to the Dodge's. For example, Edwards (1879) stated that four syntypes of the butterfly Argynnis hippolyta (= Speyeria zerene *hippolyta* (W. H. Edwards)) were "received from Mr. G. M. Dodge and taken in Oregon." Subsequent authors (e.g. Barnes & McDunnough 1916; F. Brown 1965; Dornfeld 1980) interpreted this to mean that the

specimens were collected by George Dodge. However, Elwes (1889) explained that the specimens had been received by George from Orson B. Johnson (1849–1917), a pioneer resident collector of Oregon and Washington. The entry for this taxon in Edgar's ledger (CAS) supports this contention, reading, "Oregon, Johnson." In a letter to Herman Strecker, Edgar recalled that they had received "about 20 dd and 1 Q" of *hippolyta* from Johnson (8.1881 FMNH).

**Taxa described by G. M. Dodge.** Listed below are the insect taxa described by George M. Dodge, arranged chronologically by Order, in their original nomenclatural combination, with current synonymy, type locality, and known locations of recognized type specimens. Information regarding Orthoptera is from Eades et al. (2012).

# LEPIDOPTERA

- 1. Hesperia illinois G. Dodge, 1872 (=Euphyes bimacula illinois; Hesperiidae). TL: Bureau Co., Illinois (neotype from Grundy Co., Illinois). Invalid neotype at MGCL (see Calhoun in press); syntypes at AMNH, ANSP and PMNH. Topotypes at CAS. A lectotype will be designated (Calhoun in press).
- 2. *Hesperia pawnee* G. Dodge, 1874 (*=Hesperia leonardus pawnee*; Hesperiidae). TL: Glencoe, Dodge Co., Nebraska. Syntypes at MCZ, PMNH, and CMNH. Topotypes at CAS.
- 3. *Catolcala whitneyi* G. Dodge, 1874. (Noctuidae). TL: Ohio, Bureau Co., Illinois.Syntypes purportedly destroyed. "Type" at CAS is likely from Nebraska and thus not a syntype.
- 4. *Catocala nebraskae* G. Dodge, 1875 (=*Catocala luciana* Strecker, 1874; Noctuidae). TL: Glencoe, Dodge Co., Nebraska. Lectotype at USNM. This specimen was apparently sent to W. Barnes before a fire claimed George's other *Catocala* types.
- 5. *Catocala nebraskae* var. *somnus* G. Dodge, 1881 (*=Catocala luciana* Strecker, 1874; Noctuidae). TL: Glencoe, Dodge Co., Nebraska. Location of type(s) unknown; purportedly destroyed.
- 6. *Pyrameis huntera* var. *fulvia* G. Dodge, 1900 (*=Vanessa virginiensis* (Drury, 1773); Nymphalidae). TL: Louisiana, Pike Co., Missouri. Holotype at LACM.
- Catocala titania G. Dodge, 1900 (=Catocala alabamae Grote, 1875; Noctuidae). TL: Louisiana, Missouri. Lectotype at USNM. This specimen was apparently sent to W. Barnes before a fire claimed George's other Catocala types.
- 8. Nisoniades llano G. Dodge, 1903 (=Gesta invisus (Butler & Druce, 1872); Hesperiidae). TL: Llano, Llano Co., Texas. Holotype at CAS.

## ORNITHOPTERA

- Pezotettix junius G. Dodge, 1876 (=Melanoplus borealis (Fieber, 1853); Acrididae). TL: Glencoe, Dodge Co., Nebraska. Lectotype at USNM.
- Pezotettix autumnalis G. Dodge, 1876 (=Phoetaliotes nebrascensis (Thomas, 1872); Acrididae). TL: Glencoe, Dodge Co., Nebraska. Possible syntype at USNM.
- 3. *Pezotettix alba* G. Dodge, 1876 (=*Hypochlora alba*; Acrididae). TL: Glencoe, Dodge Co., Nebraska. Syntype at ANSP.
- 4. Caloptenus lurida G. Dodge, 1876 (=Melanoplus keeleri luridus; Acrididae). TL: Dodge Co., Nebraska. Syntypes at ANSP and USNM.
- 5. *Caloptenus regalis* G. Dodge, 1876 (=*Melanoplus regalis*; Acrididae). TL: Glencoe, Dodge Co., Nebraska. Location of type(s) unknown.
- Caloptenus angustipennis G. Dodge, 1877 (=Melanoplus angustipennis; Acrididae). TL: Banks of Elkhorn River, Dodge Co., Nebraska. Location of types unknown.
- Caloptenus volucris G. Dodge, 1877 (Acrididae). TL: Glencoe, Dodge Co., Nebraska. Location of type(s) unknown.
- 8. *Caloptenus plumbum* G. Dodge, 1877 (Acrididae). TL: Glencoe, Dodge Co., Nebraska. Location of types unknown.
- Pezotettix abditum G. Dodge, 1877 (=Melanoplus dawsoni (Scudder, 1875); Acrididae). TL: Glencoe, Dodge Co., Nebraska. Syntype in ANSP.

**Patranyms.** Listed below are patronyms of insects which honor the Dodge brothers, arranged chronologically by Order, in their original nomenclatural combination, with current synonymy and honoree name.

#### DIPTERA

1. *Tabanus dodgei* Whitney, 1879 (=*Anacimas dodgei*; Tabanidae). G. M. Dodge.

# LEPIDOPTERA

- 1. *Mamestra dodgei*, Morrison, 1875 (*=Lacinipolia lorea* (Guenée, 1852); Noctuidae). G. M. Dodge.
- 2. *Pamphila juba* race *dodgei* Bell, 1927 (*=Hesperia colorado dodgei*; Hesperiidae). E. A. Dodge.
- 3. Euptoieta claudia dodgei, ♀ nov. tr. form Gunder, 1927 (=Euptoieta claudia; Nymphalidae). E. A. Dodge.
- 4. Everes amyntula tr. f. dodgei Gunder, 1927 (=Cupido a. amyntula; Lycaenidae). E. A. Dodge.
- 5. Argynnis dodgei Gunder, 1931 (=Speyeria hesperis dodgei; Nymphalidae). E. A. Dodge.

 Parnassius clodius tr. f. dodgei Gunder, 1932 (=Parnassius clodius strohbeeni Sternitzky, 1945; Papilionidae). E. A. Dodge.

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