

UNRAVELING THE 120 YEAR MYSTERY OF
ERNEST BAYET AND HIS FOSSIL COLLECTION AT CARNEGIE MUSEUM

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ABSTRACT

One hundred twenty years ago, Carnegie Museum of Pittsburgh, Pennsylvania outbid major institutions in Europe and the United States to purchase the premier private fossil collection of Ernest Bayet of Brussels, Belgium. William J. Holland, Director of the Carnegie Museum persuaded Andrew Carnegie, the museum's founder, to furnish \$25,000, a sum totaling over \$785,000 today for a collection purchased sight unseen to boost research and exhibition at Carnegie Museum's newly formed Department of Paleontology. Additionally, Holland also sought world class specimens for the planned 1907 museum expansion. Bayet had assembled the bulk of his collection, consisting mostly of European and North American fossils, through purchases and trades with over fifty late 19th century fossil collectors and dealers. While most of his collection came from purchases, Bayet also embarked on at least one field expedition. In June 1903, Bayet accepted Holland's offer to purchase his collection. In July, Holland travelled to Brussels to organize, pack, and arrange transportation of over thirty tons of fossils, destined for Pittsburgh. Prior to Holland's arrival in Brussels, negotiations proceeded through over fifty letters and at least eight telegrams. In 1903, transatlantic letters could take a week or more to arrive. Telegrams, while more rapid, were limited by expense to short bursts of information. These communication restrictions are one explanation for how misunderstandings about Bayet and his fossil collection took hold. Today, document digitization and online record access provide ways to advance our understanding of the past.

This contribution documents archival sources such as the Holland Archive at Carnegie Museum, the Royal Malacological Society of Belgium, and other European and North American sources. The biographical study of Bayet is the first dedicated to his life and motivations for collecting fossils. It provides details about the roller coaster purchase negotiations, the difficulties of packing and shipping of over two hundred fossil crates, the scientific tensions surrounding research, and a near disastrous storage decision. It also addresses 120 years of misconceptions about Bayet and his collection. Finally, this publication begins the process of recognizing hundreds of Bayet specimens recovered from classic type geologic and stratigraphic locations in Europe and North America.

KEY WORDS: Ernest Bayet, Carnegie Museum, William J. Holland, Invertebrate Paleontology, Pittsburgh

INTRODUCTION

On June 6, 1903, William J. Holland, Director of Carnegie Museum in Pittsburgh, Pennsylvania (Fig. 1), cabled four words to Ernest Bayet of Brussels, Belgium, "Carnegie Museum buys collection" (Holland Archive, Telegram to Bayet, June 6, 1903). Within days, newspapers large and small across the U.S.A. picked up the story. *The New York Times* declared, "paleontologists have long regarded the De Bayet collection as the best outside of the great museums of Europe, and there is nothing in America at present to equal it" (Anonymous 1903g). *The Los Angeles Times* reported "Andrew Carnegie has purchased from Baron De Bayet of Brussels his notable collection of European fossils and presented it to the Carnegie Museum in Pittsburgh" (Anonymous 1903m). The *Davenport Morning Star* printed an article titled "Fossils Come to America" (Anonymous 1903h), *The Paducah Sun* announced "Mr. Carnegie Buys Famous Collection" (Anonymous 1903o), while *The Dispatch* of Moline, Illinois professed "Carnegie Pays a Princely Sum for a Collection of European Fossils for Pittsburg [sic]" (Anonymous 1903i).

Negotiations for the Bayet collection commenced in 1902. Dr. Friedrich Krantz, paleontologist and mineralogist from Bonn, Germany, acting as Bayet's agent, wrote a letter of inquiry to John Bell Hatcher, Curator of Paleontology at Carnegie Museum (Vertebrate Paleontology Archive, Letter to Hatcher, October 30, 1902). It was this letter that officially alerted Carnegie Museum that Bayet's collection was on the market. Seven months later, Holland would send his four-word cable, agreeing to the purchase.

And a mere three months after that a "weary and tired" Carnegie Museum Director, William J. Holland, would return from Brussels (Figs. 2A–B) to await seven railroad cars packed with Bayet's collection (Anonymous 1903r). Unknown to Holland, the remainder of 1903 held further

challenges for the Bayet collection. On December 29th, a "most picturesque and destructive fire" erupted in the warehouse (Anonymous 1903x). Fortuitously, Bayet's fossils, stored on the first floor of a warehouse, sustained only water damage from fossil crates saturated with water during a twelve-hour effort to contain the blaze. And just days later, and unrelated to the fire, a dispute between John Bell Hatcher and Charles R. Eastman, instructor of paleontology at the Museum of Comparative Zoology at Harvard, over issues related to the Bayet collection and Eastman's veracity would require Holland to choose sides.

One hundred twenty years have passed since Andrew Carnegie (Fig. 3) provided funds for the Bayet's collection to become CM accession number 2348 (Fig. 4). In acknowledgment of the anniversary, this contribution has three goals. First, to provide a fuller biography of Ernest Bayet, including evidence for how he assembled his celebrated fossil collection. Thanks to documents that arrived with the Bayet collection, evidence exists to suggest that Bayet acquired most of his fossils in under twenty years. Invertebrate Paleontology (IP) staff estimate that Bayet's collection, consisting mostly of invertebrate fossils, totals in the tens of thousands (Carter 1973; Kollar et al. in preparation). Secondly, this manuscript delivers the first detailed account of how the Bayet collection reached Carnegie Museum including negotiations, packing, shipping, storage, and the scientific fallout between Hatcher and Eastman. And finally, it addresses inconsistencies that have lingered for over a century about Bayet, including his age, collecting time span, estimated number of fossils, and motives for selling his beloved collection. Please note that this paper relies heavily on quotations from centuries old documents. Accordingly, some passages contain outdated sentence structure and spelling.

RESEARCH PLAN

A plan for a detailed paper about the Bayet collection's arrival in Pittsburgh dates to 2003 when Mary R. Dawson (1931–2020), Curator Emeritus of Vertebrate Paleontology (VP), and Albert D. Kollar (1951–2024), IP Collections Manager, had a conversation about bringing specifics of the Bayet collection into publication for scientific research, exhibition, and education. At the time, Dawson had just retired as Curator of VP, a position that she held from 1972–2003. Dawson looked forward to working on fossil mammal research and other projects, including the story of the Bayet collection. Albert and Mary proposed a collaborative effort to bring forward details on topics such as the Bayet invertebrates, estimated by John Carter, Curator of IP (1972–1999), at “several tens of thousands” (Carter 1973:67), the 1,490 vertebrate fossils (A. Henrici personal communication 2023), and the specimens on display in fossil exhibits at Carnegie Museum of Natural History (CMNH). From these initial conversations filled with excitement, however, Dawson and Kollar soon realized that to meet these objectives, they would have to wait for a future opportunity when additional staff support might be available.

In 2019, Joann Wilson, senior author of this paper, Volunteer in IP and Interpreter for the Section of Learning and Community, in conjunction with Albert Kollar's encouragement and guidance, revived interest in publishing details of the Bayet collection on the CMNH blog. The blog posts were made possible by a 2016 CMNH Marketing Department initiative that encouraged employees to write about their unique experiences and projects at CMNH (P. McShea personal communication 2023).

Wilson and Kollar published nine blog posts on Bayet topics between 2019–2021: *Bayet's Bounty: The Invertebrates That Time Forgot* (Wilson and Kollar 2019); *Behind the Scenes with the Baron de Bayet and L.W. Stilwell Collection, Part 1: Crossing the Atlantic with a Boatload of Fossils* (Wilson and Kollar 2020a); *Behind the Scenes with the Baron de Bayet and L.W. Stilwell Collection, Part 2: The Wild West a Century Ago* (Wilson and Kollar 2020b); *Behind the Scenes with the Baron de Bayet and L.W. Stilwell Collection Part 3: The Wild West Formed Millions of Years Ago* (Wilson and Kollar 2020c); *Behind the Scenes with the Baron de Bayet and L.W. Stilwell Collection, Part 4: Buying and Selling Fossils in the 19th Century* (Wilson and Kollar 2020d); *Bayet and Krantz: 16 Words (Part 1)* (Wilson and Kollar 2021a); *Meet the Mysterious Mr. Ernest Bayet* (Wilson and Kollar 2021b); *Student of the World; Part 2: Stearns and Bayet* (Wilson and Kollar 2021c); *University of Michigan Helps Solve Century Old Fossil Mystery – Part 1: Stearns and Bayet* (Wilson and Kollar 2021d). This initial effort formed the basis for developing a detailed account of the collection's history with co-authors Lucien Schoenmakers, Janet M. Dittmar, John A. Harper, Suzanne K. Mills, E. Kevin Love, Elizabeth A. Begley, and Victoria M. Gouza.

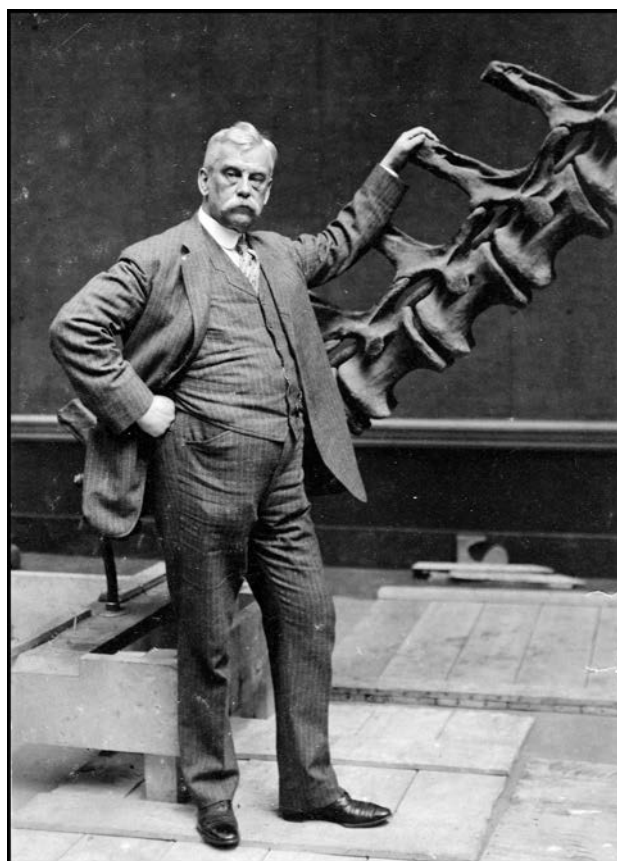


Fig. 1.—W.J. Holland (Gangewere 2011:19).

Literature search for this paper entailed locating documents within CMNH and institutions in the United States of America and Europe through online searches, and manual searches of archives and personal correspondence. The following list includes research sources invaluable in crafting this manuscript.

Online resources: Ancestry.com; Archive.org; Biodiversity Heritage Library; Geneall.net; Hathi Trust Digital Library, KBR (Royale Library of Belgium); MyHeritage.com; Newspapers.com; State Archives in Belgium; and WorldCat.org.

Carnegie Museum sources: William J. Holland Archive; Holland's Archive of Newspaper Clippings; Carnegie Museum Administrative Records, Monthly and Annual Reports; VP Archives; and IP Archives.

Archival materials outside Carnegie Museum: Annals of the Belgian Royal Malacological Society; Bulletin of the Belgian Society of Geology, Paleontology and Hydrology; Dr. F. Krantz; Rheinisches Mineralien-Kontor; The Belgian Book of Nobility; the Royal Belgian Institute of Natural Sciences; University of Chicago Library; and Yale University Library.

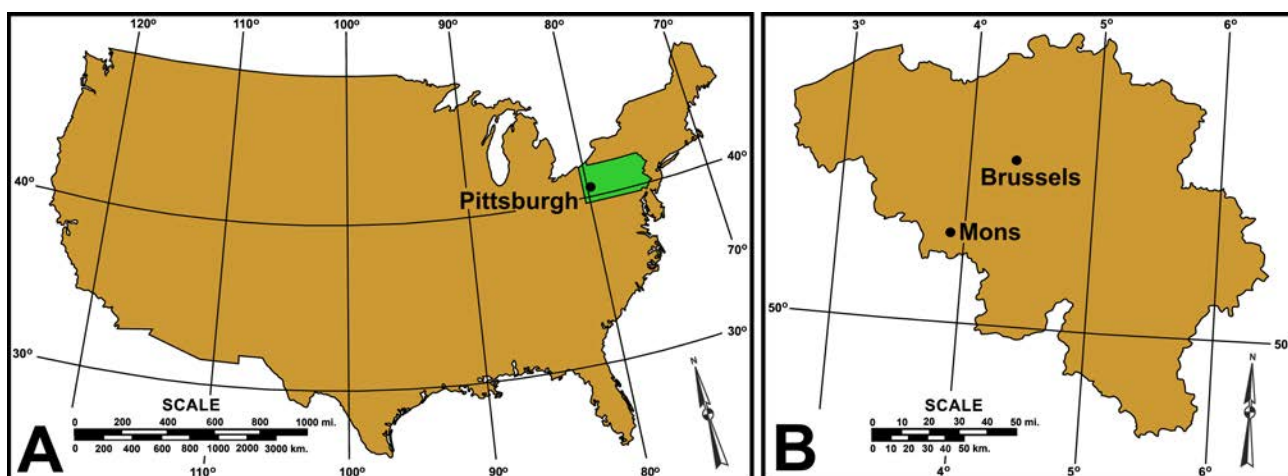


Fig. 2.—Location maps. **A**, Pittsburgh, PA, U.S.A.; **B**, Brussels, Belgium.

ARCHIVES CITED IN TEXT

Archival citations in the text are taken from the following Carnegie Museum sources with abbreviations:

Carnegie Museum of Natural History Archives. Administrative Records of the Director's Office, 1896–1975. Box 2, Folder 1: Monthly Reports, January 1897–May 31, 1905 (**DOA**).

Carnegie Museum of Natural History Archives. William J. Holland Papers, 1896–1925 (**HA**).

Carnegie Museum of Natural History Archives. Section of Invertebrate Paleontology Archives (**IPA**).

Carnegie Museum of Natural History Archives. Carnegie Museum of Natural History Library Big Bone Room Archives (**VPA**).

Archival citations in the text are taken from the following sources outside Carnegie Museum with abbreviations:

Andrew Carnegie Online Archive, Carnegie Mellon University, Available from https://digitalcollections.library.cmu.edu/node/85161?search_api_fulltext=Andrew%20Carnegie (**COA**).

W.F.E. Gurley Papers (Box 1, Folder 2), Hanna Holborn Gray Special Collections Research Center, University of Chicago Library (**GP**).

O.C. Marsh Papers, Yale University Library, Available from <https://archives.yale.edu/repositories/12/resources/4876> (**MP**).

BIOGRAPHY OF ERNEST BAYET

Charles Joseph Henry Ernest Bayet was born April 6, 1859, in Mons, Hainaut, Belgium to Frédéric Joseph Désiré Bayet and Mathilde Léonie Piquet (Coomans de Brachene 1984:185). Bayet was baptized April 9, 1859 (Ancestry.com 2016b). Mons, Hainaut, consisting of Upper Carboniferous Pennsylvanian age rock (Baele et al. 2012), is in

southern Belgium (Fig. 2B). In the years around Bayet's birth, Hainaut supplied Carboniferous age coal for Belgium's growth during the industrial revolution.

Throughout his life, official documents inconsistently recorded the spelling of Bayet's first name. For example, his baptismal record reads "Erneste" (Ancestry.com 2016b), his death certificate "Ernesto" (Ancestry.com 2008) and the Belgian Book of Nobility, "Ernest" (Coomans de Brachene 1984:185). For this paper, the authors have selected the spelling "Ernest," as it is the spelling Bayet used in two recently discovered letters, that include his full signature. The first letter was written to Othniel C. Marsh (1831–1899) (MP, Letter from Bayet, Undated), and the second letter to William F.E. Gurley (1854–1943) (GP, Letter to Gurley, April 8, 1890).

Little is known of Bayet's childhood. But indication of an interest in fossils appeared at age 21. On December 14, 1880, Bayet joined the Royal Malacological Society of Belgium. Introducing him was Belgian naturalist, Jules Colbeau (1823–1881) (Fig. 5D), and longtime Royal Malacological Society secretary Theodore Lefèvre (Société Royale Malacologique de Belgique 1881; Fig. 5E).

Less than a year later, Bayet presented fossils, from his collection to the Royal Malacological Society of Belgium. Meeting minutes declared it, "[a] very remarkable paleontological collection, especially for the coarse limestone fauna of Paris" and included this encouragement, "The President thanks our new colleague [Bayet]; he urges him to continue his research and to inform the Society of the rare or little-known species he possesses, expressing the hope that he will soon be able to make known new types for science" (Société Royale Malacologique de Belgique 1881).

In August and September of 1886, Bayet travelled to Lugano, Switzerland for the purpose of studying regional geology and paleontology. Bayet's itinerary incorporated stops in Manno, Mount Salvatore, Mendrisio, Mount Gen-

TABLE 1. Bayet's residence and occupation by year. For the years 1880–1913, data are based on member lists at various scientific societies. Discrepancies between societies are highlighted with an asterisk (*).

Year	Residence	Occupation	Reference
1880–1881	58 rue Joseph II Brussels, [Belgium]	Student	(Société Royale Malacologique de Belgique 1880, 1881)
1882–1887	58 rue Joseph II Brussels, [Belgium]	Law Student	(Société Royale Malacologique de Belgique 1882–1887)
1888–1895	58 rue Joseph II Brussels, [Belgium]	Unknown	(Société Royale Malacologique de Belgique 1888–1895)
1896, 1900	58 rue Joseph II Brussels, [Belgium]	Paleontologist	(Société Royale Malacologique de Belgique 1896, 1900)
1901–1910	58 rue Joseph II Brussels, [Belgium]*	Secretary to the cabinet of H.M. the King of the Belgians*	(Société Royale Malacologique de Belgique 1901–1902; Société Royale Zoologique et Malacologique de Belgique 1903–1910)
1911–1912	Blevio, Province of Como [Lombardy], Italy*	Unknown	(Société Royale Zoologique et Malacologique de Belgique 1911–1912)
1913	Blevio, Province of Como [Lombardy], Italy	Paleontologist*	(Société belge de Géologie, de Paléontologie et d'Hydrologie 1913)
1914–1918	Unknown	Unknown	
1919–1935	Via Imbonati 1, Cavallasca, Lombardy, Italy	Unknown	(Ancestry.com 2008; Mascolo 2018)

eroso, quarries at Arzo and Saltrio. From his research, Bayet produced a paper, and it was presented to the Société Royale Malacologique de Belgique on October 1, 1887 (Société Royale Malacologique de Belgique 1887). Of the region he wrote, “Lugano is most interesting from a geological point of view, and I think that the members of the Society will share my view, after this short presentation, because it is rare to meet, on a space as restricted, such a varied scale of terrains.” Of the fossils surrounding Manno, he added, “The plants that I collected, while being easily determinable, are nevertheless of a lower conservation than those found in our coal mines” (Bayet 1887). Bayet's description of the rock surrounding Manno was later cited by geologist Paul Kelterborn (Kelterborn 1923). Kelterborn's citation is important as it demonstrates that Bayet

did perform at least a small amount of scientific fieldwork. Decades later, William Holland, Director of the Carnegie Museum, would erroneously state that Bayet was a “collector pure and simple” with “no scientific knowledge of these things [fossils]” (VPA, Letter to Hatcher, July 27, 1903).

The authors of the current paper note that although Bayet did acquire most of his specimens by purchases or trades, his scientific trip to Lugano demonstrates that he did have some knowledge of geology and paleontology. Included in the IP Bayet archive are specimens from his trip to the area around Lugano, Switzerland. These specimens, from a stop in Mount San Salvatore, Italy, have original labels, possibly written in Bayet's own hand (Fig. 6). Of the 35 invertebrates from Mount San Salvatore in the Bayet collection, referenced herein are 17 bivalves, ten brachiopods,

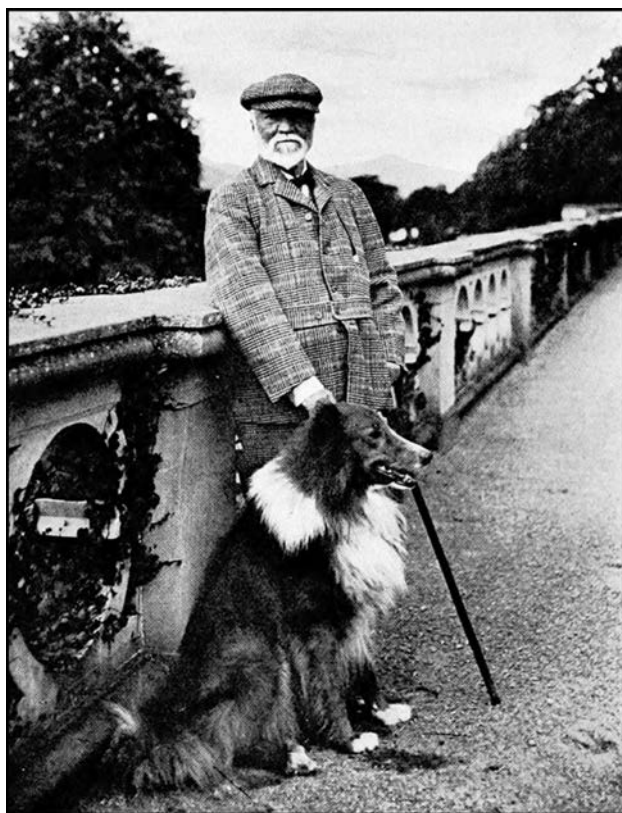


Fig. 3.—Andrew Carnegie at Skibo Castle, Scotland in 1914 (Carnegie Library of Pittsburgh archives).

four gastropods, two crinoids, one coral, and one belemnite.

In what was likely his final collecting surge based on archival correspondence (Fig. 7), Bayet supplied world class minerals and fossils for the Brussels International Exposition of 1897. Of the minerals, the Belgian Society of Geology, Paleontology and Hydrology exclaimed, “Mr. E. Bayet exhibited various beautiful specimens from his mineral collection, the samples coming mainly from the United States of America.” And about his fossils, “Paleontology is very brilliantly represented at the Brussels Exhibition...we must place the very considerable contingent that Mr. Ernest Bayet of Brussels, has drawn from his vast collections.” Belgian Society of Geology, Paleontology and Hydrology described “a magnificent *Scaphites*,” as well as “an astonishing *Baculites*,” and “a series of Ganoid fish from the old red sandstones of Scotland,” with “a magnificent *Eurypterus remipes* from the Silurian of America (Buffalo)” and “a palm tree two meters high” (Société belge de Géologie, de Paléontologie et d’Hydrologie 1897), examples which are illustrated in Kollar et al. (in preparation).

As the world turned over a new century, Bayet’s life changed too. In 1901, he became Secretary to the Cabinet of Leopold II, the King of the Belgians (Société Royale

Malacologique de Belgique 1901) and on July 10, 1902, he married Maria van Der Burch (State Archives of Belgium 1792–1919). On April 27, 1903, a mere five weeks before he dispatched the telegram accepting Carnegie Museum’s offer to purchase his fossil collection, the family welcomed their first child, Georges, into the world (Coomans de Brâchene 1984:185). A second child, Mathilde would arrive in 1905 (Coomans de Brâchene 1984:185). In 1919, Bayet purchased Villa Imbonati in Cavallasca, Lombardy, Italy (Ilparcopiubello.it 2023; email correspondence with Paola Mascolo, Spina Verde Park System Tour Coordinator, Lombardy, Italy). Bayet passed away July 14, 1935, age seventy-six in Cavallasca, Lombardy, Italy (Ancestry.com 2008).

Bayet’s Titles

In 1893, Bayet received the title, Baron de Bayet de Valmont by decree of Carlos I, King of Portugal. “He [Bayet] was granted the title of Baron by Decree 2-III-1893” (Zúquete 1961). Why Bayet received the title of “Baron,” from Portugal, is unknown. Between 1898–1901, Bayet acquired a second title, chevalier, or knight, of the Order of Saints Maurice and Lazarus. The Belgian Society of Geology, Paleontology and Hydrology noted his title in the 1898 Bulletin (Bulletin de la Société belge de Géologie, de Paléontologie et d’Hydrologie 1898). The Belgian Book of Nobility, however, recorded his title as commencing in 1901 (Coomans de Brâchene 1984:185).

Bayet’s Residence and Occupations

Bayet’s memberships in the Royal Malacological Society of Belgium and the Belgian Society of Geology, Paleontology and Hydrology offer valuable information about Bayet’s address and self-described occupation. Bayet belonged to the Belgian Society of Geology, Paleontology and Hydrology from 1897–1913, and the Royal Malacological Society of Belgium from 1880–1922. (Société Belge de Géologie, de Paléontologie et d’hydrologie 1897–1913; Société Royale Malacologique de Belgique 1880–1902; Société Royale Zoologique et Malacologique de Belgique 1903–1922).

*Note: Member lists between the societies differ slightly from 1901–1913. The Société belge de Géologie, de Paléontologie et d’Hydrologie lists Bayet as living in Blevio, Province of Lake Como [Lombardy], Italy, starting in 1909, while the Société Royale Malacologique de Belgique notes him living in Blevio as of 1911. It is unclear which date is most accurate. Additionally, the Société belge de Géologie, de Paléontologie et d’Hydrologie lists Bayet as a “paleontologist” from 1900–1913. As Bayet worked for the cabinet from 1901–1909/10, the authors consider it likely that Bayet overlooked updating his recorded occupation at the society during those years. He did however update his occupation at the Société Royale

Notification to the Accession Officer.
CARNEGIE MUSEUM.

No. 2348 Sept. 11, 1903
(To be filled by Accession Officer.)

There has been received from
Mr. Andrew Carnegie

P. O. Address, _____

(Give name and address very accurately.)

as a Gift to the Museum.
(State whether gift, loan, exchange or purchase.)

258 cases containing the
Bayet Paleontological
collections, from Brussels,
Belgium.

(Describe object, giving name, locality whence derived, time of collection, and any other important data.)

Present location in building,
Department of Paleontology.

(Inform Accession Officer of the location and present disposition of the articles.)

Referred to the Accession Officer.

Signature, J. B. Hatcher

N. B.—The above blank should be immediately filled out upon receipt of article and handed to the Accession Officer, who will preserve for binding.

W. J. HOLLAND, Director.

Fig. 4.—E. Bayet collection ascension number 2348 (Carnegie Museum of Natural History archives 1896–1975).

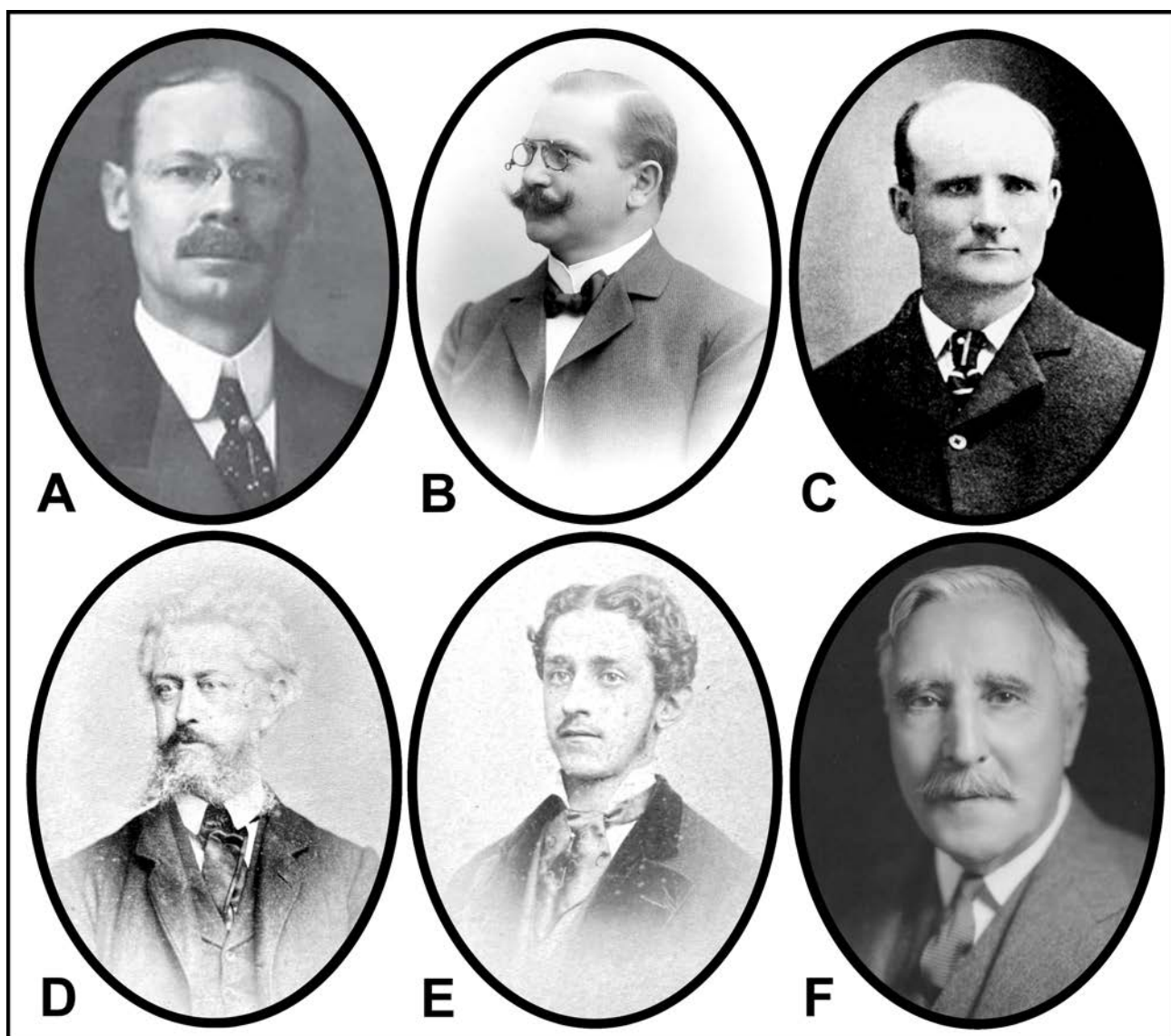


Fig. 5.—Images. **A**, Charles R. Eastman (*Annals Carnegie Museum* 1919); **B**, Friedrich Krantz (permission Ursula Müller-Krantz no date); **C**, John B. Hatcher (*Popular Science Monthly*, 1905); **D**, Jules Colbeau (permission J. Wilson, 1872); **E**, Theodore Lefèvre (permission J. Wilson, 1872); **F**, Robert A. Franks (Carnegie Corporation of New York Records, no date).

Malacologique de Belgique, effective 1901 to “Secretary to the cabinet of H.M. the King of the Belgians.” King Leopold II passed away on December 19, 1909. It is not clear if Bayet’s role as Secretary to the Cabinet ended in 1909 or perhaps extended into 1910. Finally, because of World War I, neither society published member lists from 1914–1918.

How Bayet Assembled his Fossil Collection

Bayet employed three methods to amass his collection: 1) purchases and trades with collectors and fossil dealers, 2)

fieldwork, and 3) agreements with quarry owners and supervisors. The IP Bayet archive, included as part of the 1903 purchase, contains letters, fossil lists, fossil dealer labels, collector labels, and handwritten notes. Although Bayet likely started collecting fossils as a child (Anonymous 1903r), based on letters in the IP archive, his prime collecting years were 1880–1897, when he was in his twenties and thirties (Ellison 2003; Fig. 7).

Method 1: Purchases and trades with fossil dealers and fossil collectors. — Most fossils in the collection fall under this category. Based on correspondence in the archive, Bayet made most of his fossil acquisitions through purchases and trades with fossil dealers and collectors in Eu-

rope, United Kingdom, and the United States of America. Based on the IP Bayet archive, it is estimated that Bayet could read, write, and perhaps speak at least four languages; French, German, Italian, and English. Of the more than fifty collectors and fossil dealers that corresponded with Bayet, only a few documents are written in English. Translation of these documents by co-author, Lucien Schoenmakers, is ongoing and will be the subject of future papers. Among the famous fossil collectors represented by correspondence in the archive are: C. Ubaghs, Maastricht, Netherlands; B. Stürtz, Bonn, Germany; Ernest Haeberlein, Solnhofen, Germany; Robert F. Damon, Weymouth, England; Lucien Stilwell, Badlands, South Dakota; Frederick Stearns, Detroit, Michigan; and Dr. Friedrich Krantz of Bonn, Germany. Krantz not only sold fossils to Bayet but acted as agent to Bayet during the 1903 sale.

Bayet collection specimen labels are another valuable source of specific palaeontologic and geologic information. A sample of labels discovered to date include references to: J. Colbeau, Belgium; T. Lefèvre, Belgium; A. Piret, Belgium; V. Fric, Czech Republic Geolog Institut Der K.K. Universitat, Czech Republic; R.F. Damon, England; B. Wright, England; E. Bertrand, France; E. De Boury, France; F. Krantz, Germany; B. Schenk, Germany; B. Stürtz, Germany; F. Coppi, Italy; R. Lawley, Italy; Museo De Historia Natural Del Seminario De Barcelona, Spain; F. Stearns, United States; L. Stilwell, United States (Figs. 8A–F, 9A–F, 10A–E). To complement the provenance of Bayet collection labels, Mills et al. (2023) presented an abstract at the 2023 Geological Society of America meeting in Pittsburgh, Pennsylvania.

Method 2: Fieldwork. – Bayet made at least one field expedition to Lugano, Switzerland (Bayet 1887). In 1898, Arthur Smith Woodward (1864–1944), British Museum paleontologist, briefly mentioned Bayet’s Lugano expedition in his 19-page summary titled “Synopsis of Baron E. Bayet’s Collection.” In the document, Woodward noted “fragments of Triassic fossils from Val Solda, Lago di Lugano, collected by the Baron” (Woodward 1898) and illustrated in Kollar et al. (in preparation).

Method 3: Agreements with quarry owners, supervisors and perhaps, purchases of quarries – In 1932, almost 30 years after the Bayet purchase, Holland reminisced that “The Editor [Holland], who acted as the agent of Mr. Andrew Carnegie in the purchase of the Collection of Baron de Bayet, and spent many weeks in Brussels in 1908 [sic] packing it for shipment to Pittsburgh, recalls that the Baron informed him that the specimens from Solenhofen [sic] had been acquired at the quarries from the superintendents to whom the Baron had made an offer to recompense them for all fossils found by them in good condition as they proceeded with their work. This offer continued for a couple of years, and it was thus that Baron de Bayet succeeded in amassing among other things the fine collection of insects from Solenhofen [sic] W.J.H” (Carpenter 1932).

Additionally, it is also possible that, in his quest for fossils, Bayet opened quarries. Holland hinted at this



Fig. 6.—CM 57869, likely *Daonella cerneraensis*, Triassic, Mount San Salvatore (A); accompanying label possibly written by Bayet (B).

possibility in an interview. “Baron de Bayet opened two quarries in Italy and others in Belgium in his search for rare skeletons of animals and plants now extinct...” (Anonymous 1903r).

HOW THE BAYET COLLECTION ARRIVED AT CARNEGIE MUSEUM

Negotiations and Purchase

In addition to Ernest Bayet of Brussels, six other individuals played key roles in bringing the collection to Pittsburgh. The list, below, reflects the approximate order in

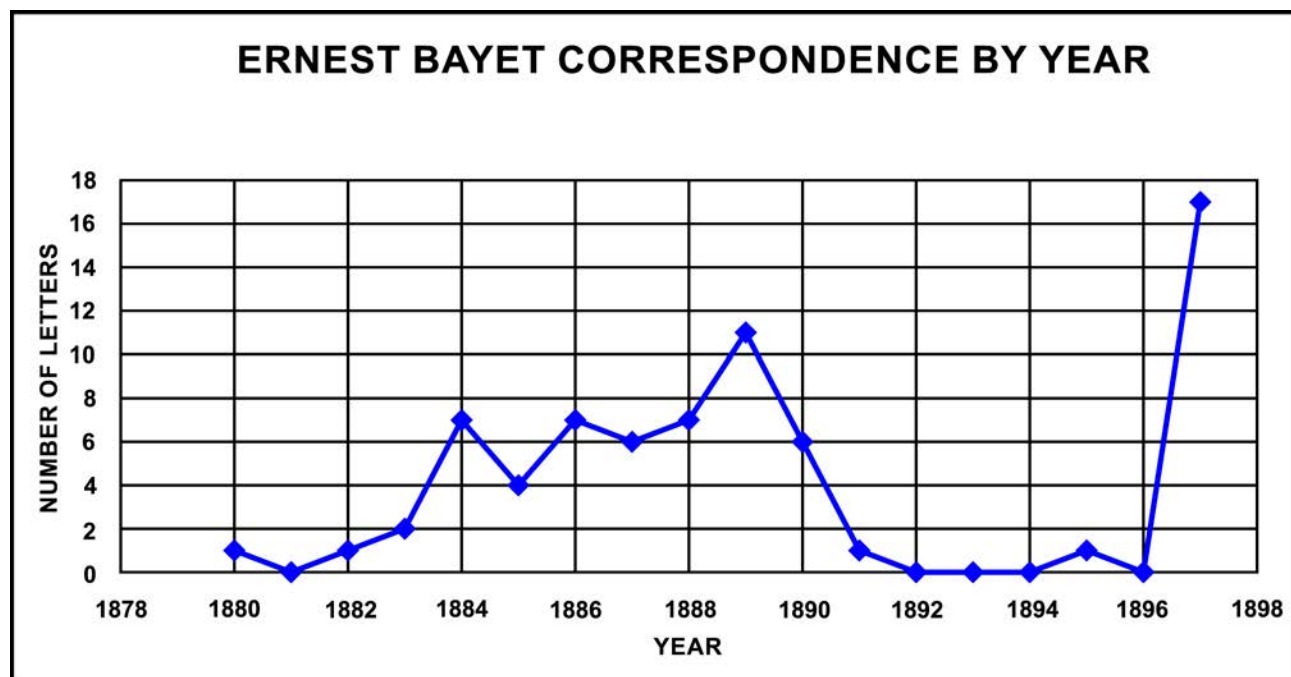


Fig. 7.—E. Bayet archival correspondence by year, 1880–1897 (Ellison 2003).

which each person entered negotiations.

Charles R. Eastman (1868–1918), fossil fish expert, and in 1903, Instructor of Paleontology at the Museum of Comparative Zoology at Harvard (Fig. 5A).

William J Holland (1848–1932), Director of the Carnegie Museum (Fig. 1).

Dr. Friedrich Krantz (1859–1926), Fossil dealer, paleontologist, and mineralogist from Bonn, Germany (About Dr. F. Krantz, *Rheinisches Mineralien-Kontor* n.d.). Krantz not only sold fossils to Bayet, but he also acted as his agent during the 1903 sale to Carnegie Museum (Fig. 5B).

John Bell Hatcher (1861–1904), Curator of Paleontology at the Carnegie Museum (Fig. 5C)

Andrew Carnegie (1835–1919), Founder of Carnegie Institute (Fig. 3).

Robert A. Franks (1862–1935), Andrew Carnegie's Financial Secretary and President of the Home Trust Company (Fig. 5F).

Carnegie Museum's path to acquiring the Bayet collection began with a routine piece of paperwork. On July 7, 1902, Holland authorized Eastman to spend \$500 acquiring European fossils. Holland wrote:

"Dr. C.R. Eastman is authorized to purchase for this Museum, during the present year fossil fishes, Ichthyosaurs, Plesiosaurs, Pterodactyls, &c., from the Liassic, Solnhofen, Devonian, and other formations of Europe, England and Scotland, to the amount of Five hundred (\$500) dollars. Of this total sum of \$500.00 it is desired that \$300.00 shall be devoted to the purchase of exhibition material and \$200.00 to a study series more especially

from the Devonian beds of Scotland. The expenditure of the above-mentioned sum of money is however left very largely to the discretion of Dr. Eastman with the understanding and agreement that he will have in mind the best interests of this Museum, that its interests shall be considered second only to that of the Museum of Comparative Zoology at Cambridge and that he shall in no way obligate the Carnegie Museum for any sum of money greater than the \$500.00 herein mentioned" (VPA, Note to file, July 7, 1902).

That same day, Holland created a document for Eastman to carry while on Carnegie Museum business that read "This is to certify that the bearer, Dr. Charles R. Eastman of Harvard University, Cambridge, Mass., is an authorized representative of this Museum and that he is entrusted with the purchase of fossil vertebrates for this Museum during his contemplated visit in Europe, England, and Scotland during the present year. Any favors that may be shown Dr. Eastman in connection with this work will be greatly appreciated by the authorities of this Museum" (HA, Note to Eastman, July 7, 1902).

Eastman had completed his doctorate in 1894, under the guidance of famed paleontologist Karl von Zittel "whose laboratory [in the 1890's] attracted a number of young American paleontologists" (Dean 1919). Holland wanted exhibit quality specimens for the projected 1907 Carnegie Museum expansion. That expansion included a hall dedicated to the Mesozoic (Gangewere 2011; Kollar et al. in preparation). Eastman's network of European paleontologists made him an ideal candidate to locate



Fig. 8.—Labels from the E. Bayet collection. A, J. Colbeau, Belgium; B, T. Lefèvre, Belgium, CM 57253; C, A. Piret, Belgium; D, E. Bertrand, France, CM 11580-11582; E, F. Coppi, Italy; F, R.F. Damon, England, CM 39146.

European fossils spectacular enough to display alongside *Diplodocus carnegii*. As Robert Gangewere, former editor of *Carnegie Magazine*, would note over a century later, “Dinosaur Hall was utilitarian, a powerful magnet for the public and a prime reason behind the Institute’s expansion” (Gangewere 2011:40). In addition to his European connections, Eastman “possessed a good knowledge of German, French, and Italian” (Holland 1919b:17).

Holland would later recollect that he and Hatcher “first became personally acquainted with Dr. Eastman” when Eastman stopped at Carnegie Museum, “for the purpose of examining our collections and urging upon Professor J.B. Hatcher the importance of endeavoring to make a collection of Paleozoic fishes” (Holland 1919a). At the same meeting, Holland also recalled Eastman informing them that Bayet’s collection, “was on the market” and “Dr. Eastman volunteered to obtain more information as to the collection than was in the possession of Professor J.B. Hatcher and myself” (Holland 1919a). This statement indicates that Holland and Hatcher may have had an inkling that Bayet’s collection was on the market, prior to Friedrich Krantz’s

famous letter to Hatcher from October of 1902 (McGinnis 1982:25).

For the remainder of 1902, Eastman obtained English and European specimens, for Carnegie Museum, from well-known fossil dealers such as Damon of Weymouth, England, and Friedrich Krantz of Bonn, Germany. Some acquisitions came to the attention of Hatcher. In October 1902, Damon wrote Hatcher about one such fossil shipment, noting that according “to instructions received from Dr. C.R. Eastman I have this day forwarded the specimens selected by him. All have been packed by myself with great care and if the box is fairly treated not a single specimen should be damaged” (VPA, Letter to Holland, October 9, 1902).

Three weeks later, formal word reached Hatcher that Bayet’s fossil collection was on the market. Krantz wrote: Dr. Eastman induced me to inform you that I am charged to settle the sale of the large, well-known fossils-collection [sic] of Baron de Bayet – Bruxelles [Brussels]. This collection is one of the most celebrated and most precious collections in Europe and contains a large number of rare



Fig. 9.—Labels from the E. Bayet collection. A, E. De Boury, France; B, V. Fric, Czech Republic, CM 39000; C, Geolog. Institut Der KK Universitat, Czech Republic, CM 1844; D, B. Stürtz, Germany, CM 29455; E, F. Krantz, Germany, CM 44499; F, R. Lawley, Italy, CM 26601.

and exceedingly beautiful specimens: *Pterodactylus* [sic] of Solnhofen, pretty plates with plants and fishes of Monte Bolca, Saurier [Saurian] of Holzmaden etc.” (VPA, Letter to Hatcher, October 30, 1902).

The short note did not include an asking price. Later correspondence would record that the initial Bayet collection asking price was “125,000 francs or \$25,000” (HA, Letter to Franks, June 10, 1903).

Exactly when Eastman previewed Bayet’s collection is undocumented by Holland; however, the *New York Times* reported Eastman as “a guest of Baron de Bayet at his chateau near Brussels” during the summer of 1902 (Anonymous 1903g). Backing up the *New York Times* claim is

Bayet, himself. During the 1903 negotiations, Bayet would inform Holland that Eastman had “a very superficial idea” of the breadth and scope of his fossil assemblage (VPA, Letter to Holland, June 22 [1903]). Within Europe, Bayet’s collection was sometimes referred to as the “Musée Bayet of Brussels” (Anonymous 1903e, 1903f).

In December, Krantz advised Eastman that “if it is still your intention to purchase this wonderful collection, I should be very glad to know your decision as soon as possibly [sic], for two other museums too are interested for this collection” (VPA, Letter to Eastman, December 12, 1902). Two important details emerge from this letter. First, the Carnegie Museum was not the only interested buyer.



Fig. 10.—Labels from the E. Bayet collection. **A**, Museo De Historia Natural Del Seminario De Barcelona, Spain; **B**, B. Schenk, Germany; **C**, F. Stearns, United States, CM 53862; **D**, L. W. Stilwell, United States, CM 40606; **E**, B. M. Wright, England.

Later correspondence would reveal that the British Museum and the Imperial Saint Petersburg Academy of Science were also negotiating for Bayet's collection. Secondly, Krantz's letter suggests that the Museum of Comparative Zoology at Harvard, Eastman's employer, was also an interested buyer. Holland would later confirm this to be true.

Based on a lack of correspondence between December 1902 and early May 1903, negotiations appear to have stalled. Then, on May 7, 1903, Krantz cabled Eastman with a terse all caps message, "REDUCED PRICE HUNDERT [sic] THOUSAND FRANCS" (IPA, Telegram to Eastman, May 7, 1903). Bayet's collection was now available at a twenty percent reduction, a decrease from 125,000 francs down to 100,000 francs (HA, Letter to Franks, June 10,

1903). In 1903, One hundred thousand francs approximated \$20,500–\$21,000 (HA, Letter to Franks, June 25, 1903). Eastman, Krantz, or perhaps both, quickly relayed the price reduction to Holland and/or Hatcher, as two days later, Holland dispatched a lengthy letter to Andrew Carnegie (HA, Letter to Carnegie, May 9, 1903). In his pitch to Andrew Carnegie, Holland proposed the idea of furnishing funds to purchase Bayet's fossil collection. Holland's letter encompassed five objectives.

1: Remind Andrew Carnegie that time was running out. – By May, knowledge of the Bayet deal had been weighing on Holland's mind for almost five months. Holland wrote, "some time ago I believe our Mr. Hatcher wrote you a few lines in reference to a great collection of European fossils,

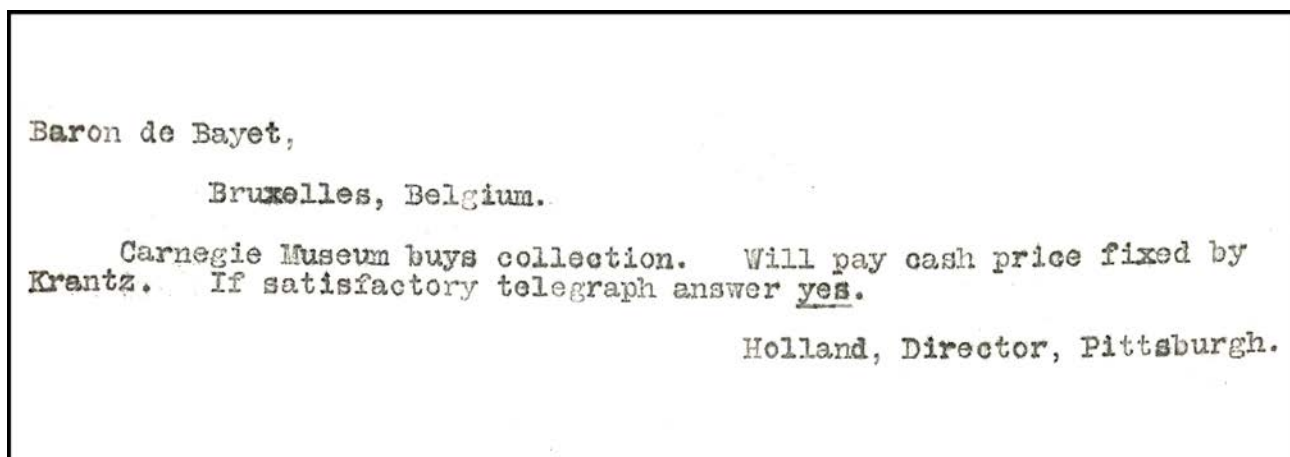


Fig. 11— Telegram from W.J. Holland to E. Bayet, June 6, 1903 (Holland archive, Carnegie Museum of Natural History Library).

which was collected by Bayet of Brussels. Owing to the death of the collector, who spent a fortune and a lifetime in assembling this collection, it is being offered for sale" (HA, Letter to Carnegie, May 9, 1903). Holland referred to Bayet as dead. Documentation of Bayet's baptismal record, his recorded birth on his marriage registration and the Belgian Book of Nobility, all show that Bayet was alive and just 44 years of age on the day this letter was written. Multiple inaccuracies surrounding Bayet's age would persist throughout negotiations. For more on Bayet's true age, see the Biography Section.

2: Impress Carnegie with names of the prestigious institutions considering offers for the Bayet collection. – Holland provided more than just the names, he also added details. "The Imperial Museum at St Petersburg [sic] has sent a representative, I understand, lately to look at it, and he will probably recommend its purchase. The authorities of the British Museum I know would like to get it if they had the money. Professor Alexander Agassiz (1835–1910) deputed an agent to examine the collection and he is coming to Pittsburgh shortly to see me in order to suggest a plan by which the Carnegie Museum and Mr. Agassiz for the Zoological Museum at Cambridge may jointly become the purchasers." A bit later in the letter Holland added one more competitor to the list, "Mr. Osborn [Henry Osborn (1857–1935)] at New York, who also has his eye upon the collection has intimated to me that he would like to get it" (HA, Letter to Carnegie, May 9, 1903). Henry Osborn was Curator of Vertebrate Paleontology for the American Natural History Museum in New York.

Note: The representative sent by the Imperial Museum of St. Petersburg could have been I.G. Tolmachoff (1872–1950). In 1922, after fleeing the Russian revolution, Tolmachoff settled in Pittsburgh as Curator of IP at Carnegie Museum. He would later recollect seeing the Bayet collection in Europe about 25 years prior to his arrival in Pittsburgh.

3: Convince Carnegie to spend \$25,000 on the purchase. – To achieve this goal, Holland emphasized the rarity of the opportunity and pointed out that "with all that we have to do in our various departments it is impossible for us on our allowance to set aside so large a sum for the purchase of one such collection at one time. Yielding to the earnest appeal of Professor Hatcher, who assures me that this is such an opportunity as is not likely to present itself again probably in a hundred years, and who assures that no American museum whatever has a collection presenting the paleontology of Europe, only here and there a few fragmentary specimens being found, and who assures me also that in order to institute comparisons between what we are finding and what is known in Europe it is desirable in the highest degree to have such a collection accessible, I have resolved to write to you and to submit the matter to you" (HA, Letter to Carnegie, May 9, 1903).

4: Get ahead of Agassiz and make a case for Carnegie Museum as sole purchaser. – Holland explained "I am not favorable to the proposition to become a joint purchaser with the Cambridge institution. To enter into partnership would almost certainly lead to contentions, for many of the specimens are unique and have never been duplicated" (HA, Letter to Carnegie, May 9, 1903).

5: Finally, appeal to Carnegie's vision for the Museum. – Holland observed "We are doing such splendid things in American paleontology that I should like very much to secure this collection, which added to what we are securing and will secure in years to come, will make our Museum one of the Gibaltars [sic] of paleontological science in the world. If I could see my way clear to chiseling out of our income the amount sufficient to purchase this collection without crippling other important work that must be done, I would at once say that we will take it. Under the circumstances, all that I can do is to lay the matter before our Maecenas. If, in your more than royal bounty, you see fit to give to Pittsburgh this collection, we shall be

most happy. If not, we shall feel as we feel when having made prayer for needed good the Sovereign Will denies us. So far as this institution is concerned you are the agent of Providence, and we accept the order of it: your will is wholly providential. In view of all that you have done I hesitate to lay such a matter before you, but to whom shall I go if not to you?" (HA, Letter to Carnegie, May 9, 1903).

On May 22, 1903, from Skibo Castle in Dornuch, Scotland, Andrew Carnegie replied, "You may buy the collection you speak of in yourn of 9th and I will pay for it" (COA, Letter to Holland, May 22, 1903). Although Carnegie agreed to the purchase on May 22nd, Holland would not read Carnegie's letter until June 6th as he departed Pittsburgh for North Carolina to orate a commencement address at the University of North Carolina (Anonymous 1903a, 1903c).

On May 24th, Bayet penned a letter in French to Holland. Bayet did not include a year in his letter, but as the letter is about the pending sale of his collection, it was written in 1903. Bayet wrote:

I am happy to hear that your museum will acquire my collections. Would you be kind enough to confirm this news to Mr. Brentano in Cadenabbia (Italy). This gentleman is waiting for your reply to sell me a [...] villa on the shores of Lake Como. I will be obliged to you to finish this business as soon as possible and proceed with the removal of the fossils as soon as possible because they are too heavy for the building in which they are located (VPA, Letter to Holland, May 24 [1903]).

The first line is puzzling. Bayet writes as if the sale is finalized, but Holland had yet to receive Carnegie's letter. Bayet's next two sentences suggest a motive. Bayet wanted Holland to "confirm" news of the sale with Mr. Brentano in Italy so he could purchase a chateau "on the shores of Lake Como." Eastman would later admit to Holland that Bayet had "probably pledged its value [the fossils] to Signor Brentano" (VPA, Letter to Holland, June 6, 1903). No evidence exists that Holland wrote or cabled Mr. Brentano, but Eastman did. On June 6th, Eastman informed Holland that he was "notifying him [Mr. Brentano] as requested" (VPA, Letter to Holland, June 6, 1903). Whether or not Bayet finalized a chateau purchase with Mr. Brentano is still an open question. The Misconceptions Section, later in this report, has more details on the possible chateau purchase.

Bayet's statement that his fossil collection was "too heavy for the building in which they are stored" provides another possibility for his rush to get an answer from Holland. Upon arriving in Brussels in July 1903, Holland would discover that the fossils were stored on all three floors of Bayet's coach house including stairways, hallways, and corridors, in addition to occupying the attic of the main residence.

On May 29th, the *Pittsburgh Daily Post* reported Hatcher's departure from Pittsburgh to "join other scientists who form an exploration expedition on behalf of the United States to examine and explore the mountains and valleys of northern Montana and the British [Canadian] province

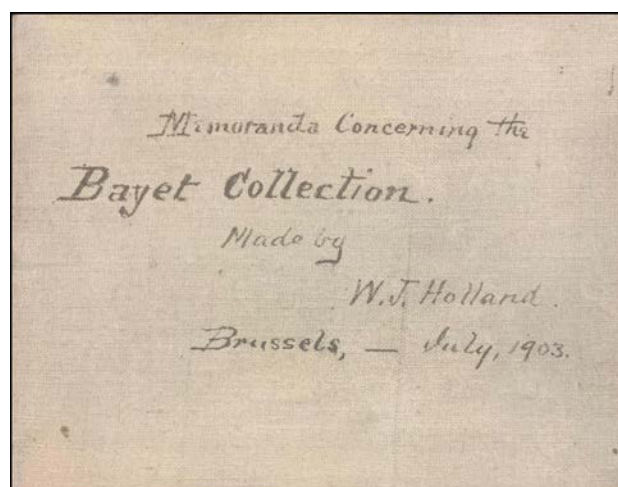


Fig. 12.—Title page to W.J. Holland's "Memoranda Concerning the Bayet Collection" 1903 (Section of Vertebrate Paleontology archives).

of Alberta" and Holland's imminent departure "to deliver the baccalaureate oration at the commencement of the university, at Chapel Hill" (Anonymous 1903b). With Hatcher and Holland away, Krantz reminded Eastman that the offer would only remain in effect for another two weeks. He also instructed Eastman to send a telegram, as soon as a decision was reached. Krantz remarked that Bayet had knowledge of the price reduction, "which he [Bayet] actually only wanted to apply" if Eastman "sent a direct telegraphic decision" (IPA, Letter to Eastman, May 30, 1903). One more communication took place on May 30th. Eastman dispatched a lengthy letter to Holland noting that Bayet was "anxious to conclude a sale at once" and, "this Belgian gentleman in waiting is a very self-willed and impulsive sort of person, and would likely as not put up his price again to \$25,000, after the 10th of June or dispose of [it] elsewhere" (VPA, Letter to Holland, May 30, 1903).

On June 6, 1903, Holland returned to his office in Pittsburgh and read Carnegie's May 22nd letter. He then dispatched three telegrams, one each to Krantz, Eastman, and Bayet, and followed by writing three letters, one each to Hatcher, Krantz, and Eastman.

To Krantz, Holland cabled, "Carnegie Museum will take Bayet collection at price quoted one hundred thousand francs — will write fully — Holland, Director" (HA, Telegram to Krantz, June 6, 1903). To Eastman Holland telegraphed "Have cabled Krantz we buy Bayet collection — will you cable also 'Carnegie Museum buys Bayet collection' will write. W.J. Holland" (HA, Telegram to Eastman, June 6, 1903). Holland would later tell Hatcher that he sent Eastman a cable since "the reduced price was made to him, and not me" (VPA, Letter to Hatcher, June 6, 1903). And to Bayet, Holland cabled "Carnegie Museum Buys collection. Will pay cash price fixed by Krantz. If satisfactory telegraph answer yes (HA, Telegram to Bayet, June 6, 1903; Fig. 11).



Fig. 13.—Possible portrait of E. Bayet by W.J. Holland, 1903 (Section of Vertebrate Paleontology Archives).

In addition to the cables on June 6th, Holland wrote three letters. To Hatcher he referenced a conversation held prior to Hatcher's May 29th departure, noting "you may rest assured that I will attend to the hint you gave me as to the possible danger of entrusting large sums of money to a stranger. The commercial end of the transaction I will look after (VPA, Letter to Hatcher, June 6, 1903). The "stranger" would be later clarified as Eastman.

To Krantz, Holland wanted assurance that terms of the deal were fixed, so he reaffirmed:

"I write to ask you that you will make out a bill of sale and send the same to me at once. As soon as it is received, I will take steps to remit to you the money. In the meanwhile, as we have become the purchasers of the collection I must ask you to see to it that it is preserved in exactly the same condition it is at the present time, and that any insurance upon it, which may exist is transferred to the Carnegie Museum, Pittsburgh, as soon as the Baron has received his payment. In regard to packing up the collection I desire to confer with Mr. Hatcher, the Curator of Paleontology of this Museum, before giving you formal instructions. It may be that I shall desire to send Mr. Hatcher to Europe to supervise this matter. The work will probably, however, be entrusted to you. We understand of course that the expense of packing will be borne by this institution. As the matter stands we have accepted your offer, and consider the sale as definitely made to us. The money will be forthcoming at

once, so soon as I receive your bill of sale, and settlement can then be made with the Baron. The matter of bringing the collection across the seas will be the subject for future action, in which we shall be glad to avail ourselves of your assistance. Please write me upon receipt of these lines, and let me know whether we understand the matter fully." (HA, Letter to Krantz, June 6, 1903).

And in a note to Eastman, Holland sought to clarify expectations:

"Professor Hatcher showed me before he left a letter from you to him in which you proposed to work up the fossil fishes on condition of your being accorded some formal recognition in the matter as connected with the staff of the Museum. This is a subject to which you did not call my attention in our pleasant interview of a few weeks ago, but I take the present occasion to say to you that I have no doubt that arrangements which will be quite satisfactory both to you and to us may be made, and that I, as the Director of the Museum in conference with Mr. Hatcher will no doubt be able to so shape matters that you will have your wishes in the particular gratified." (HA, Letter to Eastman, June 6, 1903).

Over the next month, Holland would face four significant challenges, each of which presented risk of the Bayet deal falling apart. The most pressing challenge facing Holland was deciding whom to entrust with the responsibility of inventorying, packing, and arranging shipment of Bayet's massive collection from Brussels to Pittsburgh. Early on, Holland was reluctant to go to Brussels himself, and sought other options. With Hatcher in Montana, he considered bringing Hatcher back to Pittsburgh. He also pondered entrusting the task to Krantz and/or Eastman. However, as the weeks went by, Holland changed his mind. Ultimately, he would opt to go to Brussels with Eastman to assist.

Finalizing the deal would also prove difficult. After accepting the deal on June 6th, Bayet would continue to try and renegotiate price and terms. In the end, it would take an in-person meeting between Holland and Bayet to finalize terms and price.

Arranging payment generated Holland's third hurdle. Bayet expected prompt compensation, and Holland realized that ready payment, prior to his departure for Brussels, was essential to the deal's completion.

Finally, Holland needed to keep the peace. Decisions, related to study of Bayet specimens and other issues, increased existing friction between Holland and Hatcher. As Brinkman would later observe, Hatcher and Holland were not "well suited for one another" (Brinkman 2010: 141). "Given Hatcher's temperamental and straightforward nature, which would often run headlong into Holland's distaste for being challenged by subordinates" their relationship was at times fraught with irritation (Dingus 2018:300). Friction, between Hatcher and Holland, was further heightened by the presence of Eastman, who at times was less than genuine. A century later, Tom Rea, freelance writer and author of "Bone Wars," would note

that “Hatcher didn’t trust Eastman, and Holland picked up some of Hatcher’s unease” (Rea 2021:166). Holland tried to keep tensions between Hatcher and Eastman at bay, at least until Bayet’s fossils arrived safely in Pittsburgh. But by the end of 1903, tensions would reach a boiling point. As early as June 7th, Holland and Hatcher begin a series of letters referencing, amongst other topics, Eastman’s veracity. Holland revealed:

“I enclose for your perusal two letters, which I have sent Krantz and Eastman respectively. After you have read the copies you will oblige me by returning them to me to be formally filed. You will observe that I have tried to make Eastman feel comfortable. I think it is important to do so at the present time, and keep him in good spirits until we know definitely what we are going to do. He might in some way make trouble for us as he has shown a disposition to “neb in” in this matter, and has been negotiating with Krantz, as if he were our representative, I think I understood you to say that you would have no particular objection to having him study the fishes under our auspices. At all event no harm can come from holding out to him the hope that he maybe [sic] permitted to do this. As to entrusting the money to him I may say at once that I am not in the habit of doing business in that way. When ordinary banking facilities are available, I prefer to follow commercial usages” (HA, Letter to Hatcher, June 7, 1903).

Note: The term “neb,” short for nebbly, is a Scots Irish term brought to the United States during the late 1700’s and early 1800’s. It means to be “nosy or inquisitive” (Pittsburghspeech.pitt.edu 2011).

On June 8, 1903, Holland discussed multiple topics in his correspondence with Andrew Carnegie. Holland observed:

“Your most gracious consent to purchase the Baron de Bayet collection at Brussels has made me very happy and when Mr. Hatcher who is out in the wilds of Montana, hears of it, I think that he will for once lose his quiet dignity and go out into the sage-brush and turn a handspring. The collection is one of the most famous in Europe, and I received your letter just in the nick of time. I have had an option on it until the 10th of this month, after which I was advised by the agent [Krantz] that if not sold to us it would forthwith be sold to the Imperial Museum of Natural History at St. Petersburg. Mr. Agassiz’ representative, Mr. E. [sic] R. Eastman, came on to see me about it three weeks ago, and Mr. Morris K. Jesup [1830–1908], who spent an afternoon with me here, having come from New York especially [sic] to take a peep at our Museum, also stated their desire to get the collection. But we are ahead of them in the game” (HA, Letter to Carnegie, June 8, 1903).

Also, on June 8th, Eastman wrote Holland that Hatcher agreed to let him go to Brussels as a Carnegie Museum representative. Eastman wrote:

“Regarding the business negotiations I have no word to say, but as a paleontologist interested solely in the scientific value of the collection and its future usefulness in this country, I must speak emphatically, and declare it an

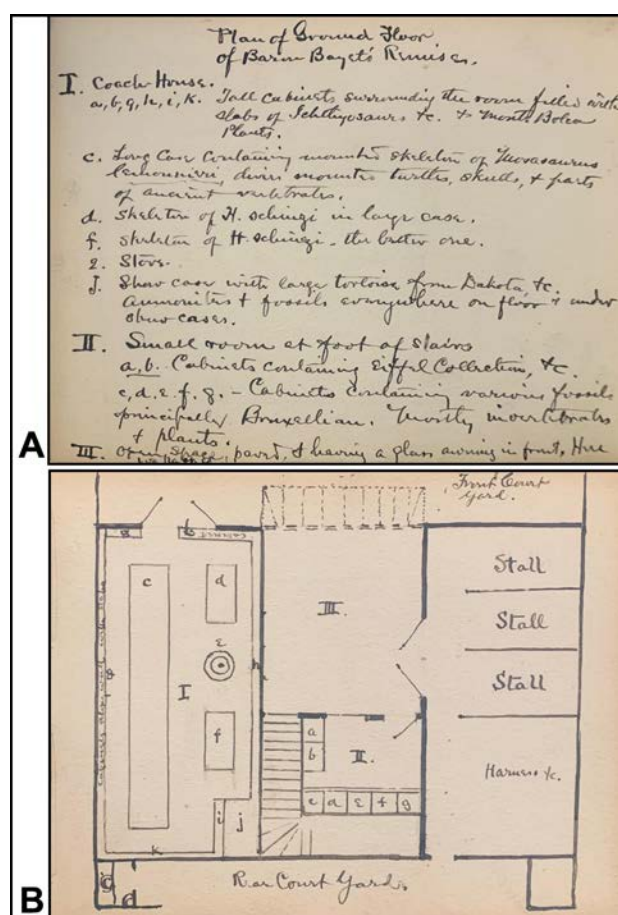


Fig. 14—W.J. Holland’s 1903 notes (A) and sketch plan (B) of the ground floor of Baron Bayet’s remise (coach house) (Section of Vertebrate Paleontology archives).

imperative necessity that a good deal of preliminary work be done on it, or parts of it rather, before it is packed up. Mr. Hatcher fully understands the details of this matter and it is here that his arrangements with me come in. These were to the effect that on acquiring the collection I should act as an official attached to his Department [sic] and under this direction that I should be sent to Brussels, invoice the most valuable specimens, and superintend their packing up; that I should set aside the large percentage of unlabeled specimens, and in connection with the owner [Bayet] and my friends at the Musée d’Histoire nat [naturelle]” (VPA, Letter to Holland, June 8, 1903).

Eastman also added “In a word, I offered myself and was accepted in the event of a favorable answer from Mr. Carnegie, as a temporary member of at least of the Carnegie Museum staff” (VPA, Letter to Holland, June 8, 1903). His letter ends with a P.S. “As I am just leaving for New York, would say that if you desire to talk over some of these matters further, I can make an appointment with you after Friday in Pittsburgh. Kindly address me at Fifth

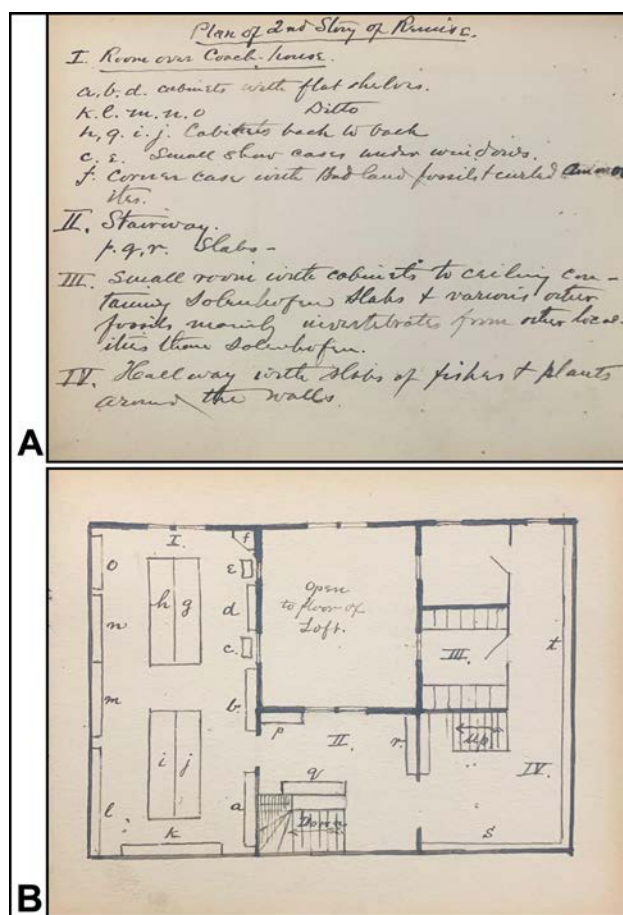


Fig. 15.—W.J. Holland's 1903 notes (A) and sketch plan (B) of the second story of Baron Bayet's remise (coach house) (Section of Vertebrate Paleontology archives).

Avenue Hotel, and oblige" (VPA, Letter to Holland, June 8, 1903). Eastman would arrive in Pittsburgh within days.

On June 10th, Bayet cabled Holland that he had no knowledge of the price reduction to 100,000 francs, writing "Krantz has of his own accord reduced the request to one hundred thousand." But followed with, "[I] accept however your proposal, expressing the wish, if possible, to keep Belgian molluscs [sic] and plants, which are few in number. Cabinets not included in price. Package and transport costs at your expense" (VPA, Telegram to Holland, June 10, [1903]). Given that Krantz told Eastman of the reduction in a letter dated May 30th, it is unlikely that Bayet was caught unaware. Why Bayet balked at the reduced price is unknown, but Holland acted quickly. He agreed to increase the price by 2500 francs, for a total sale price of 102,500 francs. Holland would later explain to Hatcher that "it is my wish to acquire the collection in its entirety, including the Belgian mollusks and plants, and for this purpose to offer him as grace money an additional five hundred dollars – or two thousand five hundred francs"

(HA, Letter to Hatcher, June 10, 1903).

Also on June 10th, Holland wrote letters to Hatcher and Eastman regarding the Bayet collection.

To Hatcher, Holland requested details of what had been promised to Eastman. It would later turn out that Hatcher had made no agreement with Eastman, beyond study of the Bayet fish, but Holland would not discover this fact for another few weeks. Holland wrote:

"I am in receipt of a letter from C.R. Eastman, a copy of which I have made and enclose to you. This is a matter which you never discussed with me at all, and if my memory serves me correctly you expressed a decided aversion to having Eastman undertake the task which he proposes. There was nothing indicated to me at all events in your conversation with me in reference to this matter, and whatever took place between yourself and Eastman was without my knowledge. Judging from the casual remarks you dropped just before leaving, Eastman's proposition did not meet your approval. However, I may be mistaken, and Eastman's version of the negotiations which took place between you and him may be entirely correct." (HA, Letter to Hatcher, June 10, 1903).

To Eastman: Holland remarked:

"What you write to me in reference to your conversation with Mr. Hatcher is to a certain extent in the nature of a surprise as Mr. Hatcher never intimated to me that he had even tentatively made such arrangements" adding, "but I did not understand that it had been agreed upon between Mr. Hatcher and yourself that you were to be permitted to go abroad as our representative and take over the collection and bring it here. That negotiations contemplating such an arrangement had been entered [sic] into between yourself and Mr. Hatcher is entirely new to me." Holland further remarked, "I am writing to-day to Mr. Hatcher, whom I hope to catch about the middle of the month, when he comes in from one of his excursions afield, and upon receipt of his reply to me I will communicate with you more intelligently. I may say that personally I am not at all averse, if such arrangements meets [sic] with Professor Hatcher's approval, to have you undertake the task you propose, provided ways and means can be found. It is but proper however, to say to you that I, without knowing anything about the matter, having determined upon the purchase on conference with Mr. Carnegie, had mentally decided upon sending Mr. Hatcher himself, or Mr. Ortmann, our curator of invertebrates, over to Belgium to attend to the packing of the collection" (HA, Letter to Eastman, June 10, 1903).

Note: Arnold Edward Ortmann (1863–1927) was a zoologist and Carnegie Museum Curator of Invertebrate Zoology in 1903.

Finally, also on June 10th, Holland sought assurance that funds would be available to pay Bayet. To Robert Franks, Financial secretary for Andrew Carnegie, Holland inquired "In case you have not yet received instruction from Mr. Carnegie would you accept the enclosed correspondence, copies of which I send you, as a warrant for placing at my disposition in the first instance the sum of

102,500 francs, and in the second instance, hereafter as it may be needed, needed, money to defray the cost of packing, freight, and possibly the services of a man to supervise the latter work, which ought to be done with extreme care, that the scientific value of the collection may not be impaired?" (HA, Letter to Franks, June 10, 1903).

On June 11th, Holland addressed four issues with Bayet: the Belgium mollusks, packing and shipping, security, and insurance. Holland wrote:

"I am in receipt of your cablegram of the 10th inst. [sic] in which you accept my offer to purchase the collection of fossils in your possession for the sum of one hundred thousand francs, it being understood that the cases contain the collection are not included in the sale and that this institution is to pay the cost of packing, transportation, etc. You express in your cablegram the desire to reserve for yourself, if possible, the mollusks and the Belgian plants, which you inform me constitute a small portion of the collection. The offer that I made was, however, to purchase the collection in its entirety, and I wish to obtain the entire collection as it stands without reservation. The offer made was based upon the understanding that the collection as a whole was to pass to us in the transaction. Nevertheless, in order to make the transaction entirely agreeable to you, and trusting that you will realize that my disposition is to treat you with entire consideration, I propose to pay you the sum of two thousand five hundred (2500) francs additional, you upon receipt of one hundred and two thousand five hundred francs to turn over to us the collection in its entirety."

"I wrote to your agent Krantz several days ago requesting him immediately upon receipt of my letter to make out a bill of sale, and informing him that as soon as such bill of sale is received the remittance of the money in payment of the collection will be made. We will as soon as it is possible depute [delegate] a proper person to repair to your city and make a close inventory of the collection and take charge of the same for the purpose of packing it up and bringing it to this country. Meanwhile, as the transaction is now closed, I must ask of you that you will kindly consent not to allow anyone in any manner to interfere with the collection, unless duly accredited by myself as Director of the Museum in Pittsburgh, to do so."

"I presume that you carry some insurance upon this collection, and will be glad to make arrangements through your agent, when he appears upon the ground, to have the insurance transferred to this Museum, the proper consideration of course being allowed for the unexpired term of the policies which may now exist. These details will all be attended to by the proper party. It is barely possible that I myself may find it necessary to come over in order to conclude this transaction. I shall however apprise you of what steps will be taken as soon as a decision is reached" (HA, Letter to Bayet, June 11, 1903).

On June 12th, Holland sent an urgent telegram to Hatcher at the Hotel Havre, Havre, Montana, asking "Did you arrange with Eastman he go to Europe pack up Bayet col-

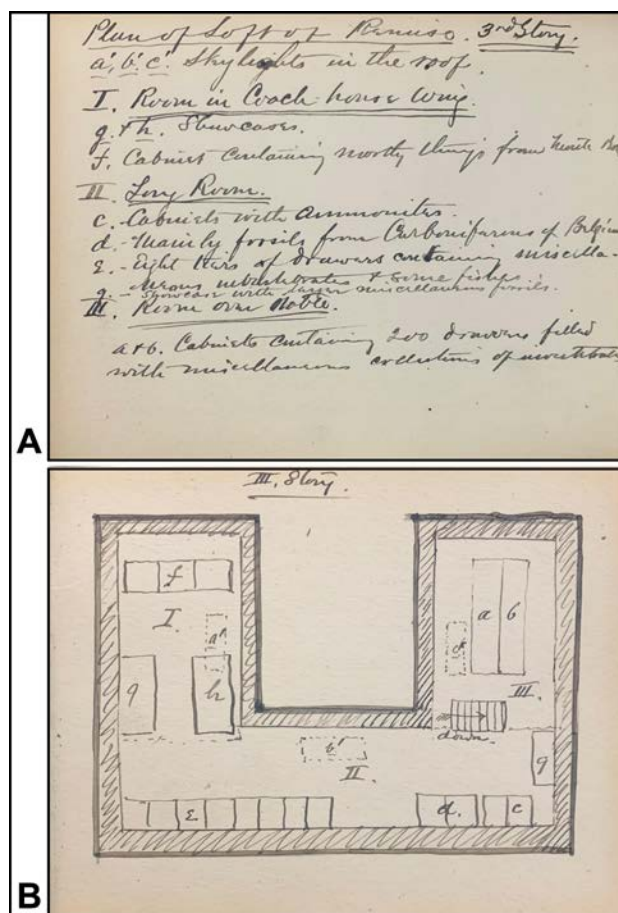


Fig. 16.—W.J. Holland's 1903 notes (A) and sketch plan (B) of the third story of Baron Bayet's remise (coach house) (Section of Vertebrate Paleontology archives).

lection and study same there says to wire answer" (VPA, Telegram to Hatcher, June 12, 1903). Hatcher would not reply until June 22, 1903.

Meanwhile, Krantz, as Bayet's agent, attempted to exclude the Belgian mollusks, explaining "these pieces were not included at all because they have a mere local interest." Pivoting topics at the end of the letter, Krantz remarked "by this acquisition your Museum [sic] has grown one of the most interesting and most precious museums of the United States, for you have got an exceedingly valuable paleontological [sic] collection at a very moderate price. Some years ago Baron de Bayet had already an offer for this collection at this price in Europe, but he would not allow the deduction" (IPA, Letter to Holland, June 13, 1903). By "deduction," Krantz was referencing the price reduction from 125,000 francs to 100,000 francs.

While Holland negotiated the Belgian mollusks, a new dilemma appeared. Newspapers mistakenly reported that Andrew Carnegie purchased the Bayet collection for Harvard. The *Pittsburgh Weekly Gazette* published an article titled "Harvard Claims Carnegie Bought Fossils for Her"

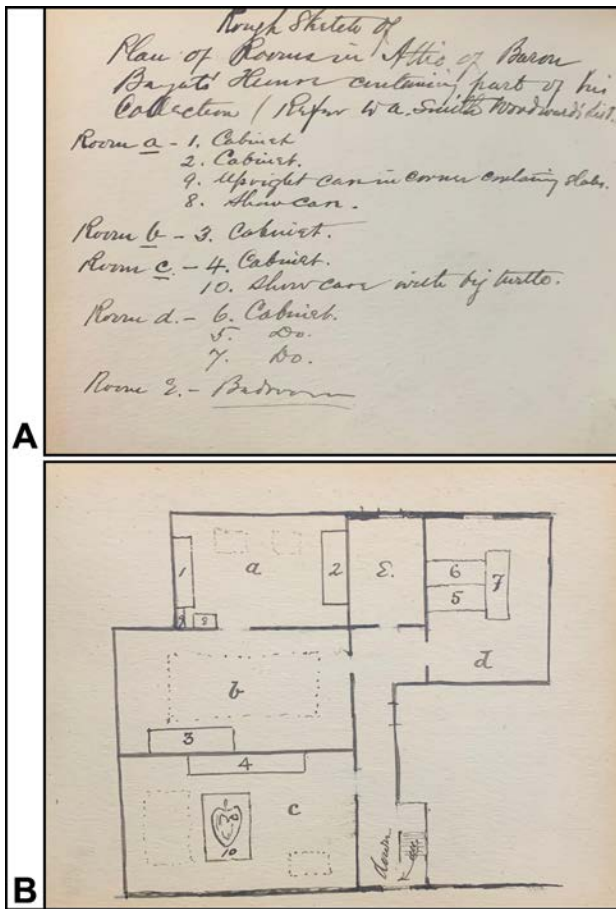


Fig. 17.—W.J. Holland's 1903 notes (A) and sketch plan (B) of the of the attic in Baron Bayet's main residence (Section of Vertebrate Paleontology archives).

(Anonymous 1903k). *The New York Times* declared that “a short time ago, Dr. Eastman found that the Baron would sell the collection and at once interested Mr. Carnegie in the project of buying it for Harvard’s Zoological Department” (Anonymous 1903g). Some publications went a step further. The *Boston Evening Transcript* announced that “Dr. Charles R. Eastman of the Harvard Museum of Comparative Zoology sails for Europe from New York today, to take possession of the zoological collection of Baron de Bayet [sic] of Brussels, which was just purchased as a gift to the university [Harvard] by Andrew Carnegie” (Anonymous 1903d). A shortened version of the *Boston Evening Transcript*’s account was picked by the *Fitchburg Sentinel* under the heading “Telegraphic Brevities” (Anonymous 1903l).

Eastman was likely the source of the error. He provided Holland with various explanations. On June 13th, he wrote “it occurs to me that the absurd report I sailed to take possession, &c, may have originated from the fact that my sister, Miss Eastman sailed Wednesday on the *St. Paul* with

a party for Norway and I mentioned to my associates on Tuesday, before leaving that I intended to see her off, and had written you asking to make an appointment in reference to the Bayet matter” (VPA, Letter to Holland, June 13, 1903). Two days later, Eastman placed blame on the telegraph office. “I am inclined to believe that the whole mess simmers down to busy bodies in the telegraph office” (VPA, Letter to Holland, June 15, 1903).

The inaccurate stories were quickly corrected. On June 12th, *The Boston Globe* quoted Harvard University President, C.W. Eliot (1834–1926), stating that “there was nothing in it” (Anonymous 1903j). Eliot was referencing the rumor that Andrew Carnegie purchased the Bayet collection for Harvard. In Pittsburgh, under a section titled, “Bright Bits of Gossip,” the *Pittsburgh Daily Post* announced, “Dr. C.R. Eastman, curator of the department of paleontology at Harvard University, is in Pittsburg [sic] as the guest of Dr. W.J. Holland, director of the Carnegie museum [sic]. Dr. Eastman expresses his unqualified surprise at the reports which have been sent out from Cambridge during his absence by unauthorized persons that the collection of Baron de Bayet has been purchased by Andrew Carnegie for Harvard, and positively denies the report. Dr. Eastman states that he has asked the officials of Harvard to correct this unfortunate error. He added ‘I have not corresponded with Mr. Carnegie about the collections. The negotiations have been wholly in the hands of Dr. Holland’” (Anonymous 1903n).

Returning to the predicament of the Belgian mollusks, Holland received a letter from Bayet, yet again, seeking to renegotiate. Bayet wrote “since the Carnegie Museum has agreed to this sum [100,000 francs], but I hope – without making it an absolute condition – that you will leave me the Belgian fossil mollusks and plants which besides are quite unimportant” (VPA, Letter to Holland, June 14, [1903]). Krantz would follow up emphasizing the same point just days later, Between Krantz and Bayet, four attempts would be made to persuade Holland to omit the Belgian mollusks. Holland was not dissuaded.

Bayet’s attempts to exclude the Belgian mollusks have two possible motives. First, word of the Bayet sale may have reached the European scientific community as early as June, and Bayet may have been trying to diminish negative feedback. Certainly, the news was out by August. *The Atlanta Constitution* would write “European scientists and, particularly those of Belgium and the Netherlands, are loud in their denunciation of Baron De Bayet, who sold his great paleontological collection to Andrew Carnegie for the Pittsburg [sic] Carnegie museum [sic]” (Anonymous 1903p). Krantz hinted at a related motive, telling Holland that Bayet “intended to give them [Belgian mollusks] as a present to the Museum of Bruxelles” (IPA, Letter to Holland, June 17, 1903). Bayet may have hoped that donating or selling his Belgian fossils to the Belgian Royal Institute of Natural Sciences would reduce scientific displeasure.

By June 22nd, Bayet had received Holland’s counteroffer of 2500 francs for the Belgian mollusks. Bayet

countered back, requesting 5000 francs, explaining, “The museum in Brussels would offer me, I know for certain, five thousand francs from the Belgian fossils. I hope you will do the same. By selling my entire collection for 105,000 francs, I’m not doing a very brilliant transaction, but necessary because the weight of the fossils threatens to bring down my house. I leave the small increase that I ask for to your estimation and I would be happy if you could judge for yourself how important my collection is” inserting that “He [Eastman] will be amazed and you too when it comes to packing.”

Regarding the matter of insurance on his collection, Bayet assured Holland that it would be transferred to Carnegie Museum and ended his letter with mention of the press. “I will be careful not to talk about the sale of my collection as you asked me. Already yesterday, I received a letter from an association of American journalists asking me for details. I didn’t give it to them” (VPA, Letter to Holland, June 22, 1903).

On June 17th, Krantz requested updated timelines for packing and shipping payment. He wrote:

“Baron de Bayet wrote me this day, that he should like the package of the collection be made as soon as possible as he intended to leave Bruxelles July 25th to make a longer journey. If you will entrust the packing up to me, I am ready – as soon as I have your cable-answer – to depart for Bruxelles and to arrange this work. I should however prefer to see Mr. Hatcher, director of the paleontological department of your museum, here to examine the collection once more, before it will be packed up. I should go with him or meet him in Bruxelles. The expenses of the package [sic] would go on your account. In regard to the payment I beg kindly sent [sic] me a cheque for 100000 frcs [francs] – on my account payable at the Credit Lyonnais in Bruxelles – at your earliest convenience. I shall immediately acknowledge it by sending you Baron de Bayet’s and my receipt. If you don’t like the collection immediately sent to the Carnegie Museum, the boxes may remain in Bruxelles or Antwerp at a dispatcher, until you let me have your further informations [sic]” (IPA, Letter to Holland, June 17, 1903).

A few days later, Hatcher clarified his understanding with Eastman regarding study of the fossil fish. From Montana, Hatcher remarked:

“I am very much pleased to know that Mr. Carnegie has provided the funds for the purchase of the Bayet collection. I returned to Havre last night from my three weeks trip in Canada, all the time beyond postoffice [sic] or telegraph communication. I was too beastly tired last night to write you, but telegraphed both you and Eastman, though I presume it is too late, as you must already have arrived at a decision. I am so pleased that we are to secure the collection, that, as I told you once before, I do not care how we get it just so we do get it. If you are convinced that Dr. Eastman will look out for our interests in this matter to the best possible advantage, I am quite satisfied. My only wish in the matter was to be sure that you did not presume and

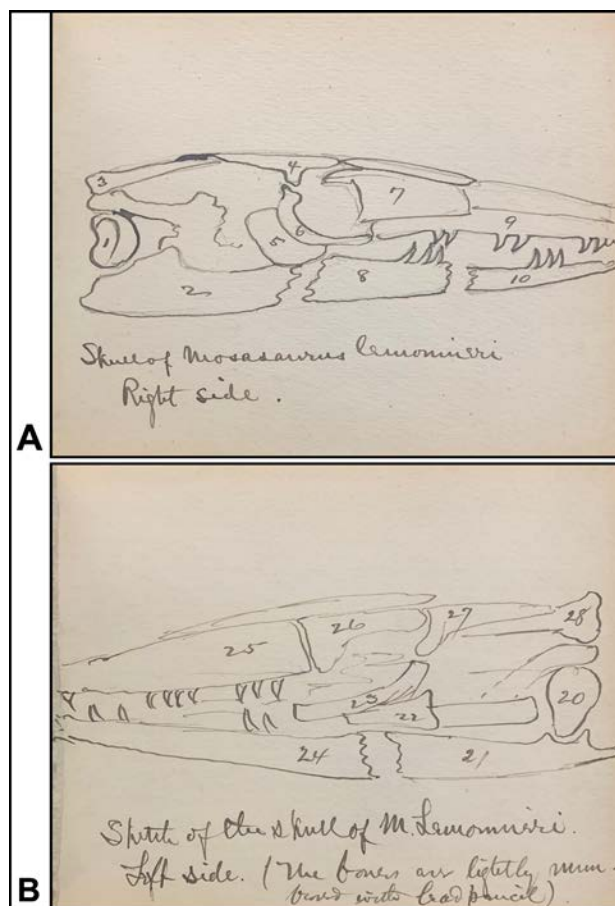


Fig 18.—W.J. Holland’s 1903 sketch skull of the *Mosasaurus leonardi*. A, right side; B, left side (Section of Vertebrate Paleontology archives).

rely too much on my knowledge of Eastman, who is not a close personal acquaintance of mine. I should feel much better if you or I could go over and make an invoice of the material with Eastman, who is a good paleontologist from the theoretical side but has had almost no experience in the collecting and handling of material.”

“The only promise I made him was in the event of our purchasing the collection he should have the privilege of working up the fishes, but without any salary in case he did so, the results to be published in the publications of our Museum. I made no promise that in the event of the purchase of the collection he should be sent to Brussels, & c,&c., as stated in his letter of June 8th to you. He told me that he was returning to Europe, (where he had left his family), in a month and that if we purchased he would be glad to give any assistance possible in expediting matters and in identifying material.”

“I would suggest that before payment is made on the collection a thorough invoice of it be made and all data possible be secured as well as provision for the care of the

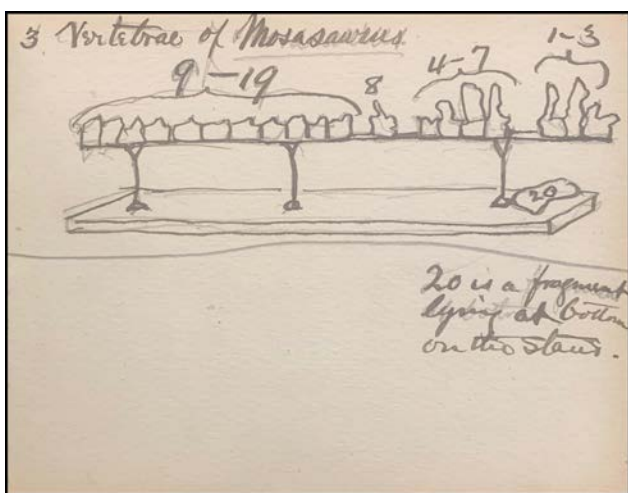


Fig. 19.—W.J. Holland's 1903 sketch of vertebrae of *Mosasaurus leonieri*, (Section of Vertebrate Paleontology archives).

collection where it is until such time as it can be packed up and facilities (room, &c.) for packing. I am quite satisfied with any arrangements you may make in these matters and only council caution. If you wish I will go over and look after the matter personally, and can go as soon as I hear from you that you wish it done by me as the responsible curator of the department. Have had a very hard but satisfactory trip into Canada. The mosquitos were fierce" (VPA, Letter to Holland, June 22, 1903).

With this letter, Hatcher confirmed that his only promise to Eastman was study of the fossil fishes. Although written June 22nd, this letter would not arrive on Holland's desk until June 27th.

Before reading Hatcher's June 22nd letter, with its offer to go to Brussels, Holland was close to a decision. In a letter to Eastman he remarked, "I have about reached the conclusion to go over myself as soon as possible to Brussels" and "I think you and I will go over together. I will let you know by letter or by telegram my final decision as to dates, etc., as soon as I can make arrangements" (HA, Letter to Eastman, June 24, 1903). A day later, Holland clarified his reasons:

"The museum Committee on conference with me has decided that in view of all the facts it is important that I should go over at once to Belgium in order to conclude arrangements for the acquisition of the Bayet collection, the purchase of which Mr. Carnegie has authorized. I have received a cablegram from the Baron de Bayet accepting our offer, and an intimation from him that he wishes the money paid to him at once and steps taken immediately to remove the collection from its present quarters. Mr. Mellor, Col. Church and the Committee think that I ought therefore to go at once to Brussels to settle with the Baron, carefully inventory the collection and take steps to have it brought

over. It will be necessary for me to hire help to pack it, and some scientific assistance also in correctly verifying and going over the labels."

Holland added "The purchase of the collection itself calls for a cash payment of from \$20,500 to \$21,000" and said, "There will then be the necessity of employing men for packing the collection and will be at least five hundred dollars to pay to experts whose services must be used in this connection. Professor C.R. Eastman of Harvard is designated by Prof. Hatcher as the man to look after a portion of this work, and I think I can secure Eastman's services for a small compensation, at the utmost five hundred dollars." Holland added, "I explain the matter fully to you so that you may understand that I have need of money. I hope to be able to return to you a couple of thousand dollars or thereabouts out of the sum which I ask for. If I do, I will have landed the collection in Pittsburgh for \$23,000 as against \$25,000 which was the asking price in Brussels" (HA, Letter to Franks, June 25, 1903).

Arrangements, Travel, Packing and Shipping

With the decision made to go to Brussels, Holland focused on getting the collection safely back to Pittsburgh. In 1903, communication moved more slowly than today. Holland and Hatcher's letters focused on prompt payment, packing, shipping, travel arrangements, and collection security. On June 27th, Holland wrote four letters, one each to Bayet, Carnegie, Eastman, and Hatcher.

To Bayet. — "I have made arrangements to sail from the city of New York on the 8th day of July, by way of Southampton. I cannot be in Brussels before the 16th of July. I regret exceedingly that my important engagements here make it impossible for me to leave earlier. I shall do myself the honor of calling upon you immediately upon my arrival in Brussels, and shall arrange with you in personal conference all details in reference to the purchase of your collection which has been concluded. I have no doubt that we can upon personal conference reach an understanding in reference to all matters of detail that will be quite satisfactory and agreeable to both of us" (HA, Letter to Bayet, June 27, 1903).

To Carnegie — "Mr. Hatcher is in Montana and cannot be reached and entrusted with the important duty of making an inventory of the collection [Bayet collection] and packing the same. The board of trustees have therefore decided that it is imperatively necessary that I shall go over and attend to this important work" adding "I would have been glad to have had someone else undertake this work, as for me to leave at this time is exceedingly difficult and involves me in great personal inconvenience" (HA, Letter to Carnegie, June 27, 1903).

The letter ended with a nudge to Andrew Carnegie about the financing. "I have taken the liberty of submitting to Mr. Franks copies of the correspondence which has taken place between yourself and myself in relation to the

splendid collection of Baron de Bayet, and I hope that before I sail Mr. Franks will have received instructions from you to place at my disposition the money which I must have in order to make settlement with the Baron” (HA, Letter to Carnegie, June 27, 1903).

To Eastman — “I am in receipt of the long expected letter from Hatcher, in which he informs me, as I have already written you, that it was his understanding that you were to work over the fishes, but in which he says he had no understanding without at all in reference to the remainder of the work, although the matter had been talked over. The arrangement of all the details is of course in my hands, and I am acting hereafter wholly on my own initiative. Hoping that the arrangements that I have made will meet with your prompt approval, and that I may look forward to having you with me as a companion de voyage” (HA, Letter to Eastman, June 27, 1903).

To Hatcher — “Your letter of June 22nd has just been received. Your previous communications of June the 21st were also received. I have engaged passage on the S.S. *New York*, sailing from New York on July the 8th. I shall take Prof. Eastman with me and will proceed at once to Brussels. My first step will be to make a careful inventory of the collection and make arrangements to have the same carefully packed. In fact I shall endeavor myself to supervise this work so far as possible and so far as the time at my command will allow. I propose to employ Eastman to work over the fishes, as you suggest, and to give assistance in determining the geological horizons of certain of the specimens which, according to Prof. Eastman, require to be compared with material in the Royal Museum of Brussels. I will use my best efforts to see that this matter is handled carefully. It may be that after your return to us in the fall it will be necessary also to send you over. However, I can say nothing definitely in reference to the matter [until] I have seen the collection” (HA, Letter to Hatcher, June 27, 1903).

By June 29th, Eastman backed away from his suggestion that Hatcher had promised him a position at Carnegie Museum. “Mr. Hatcher has also written me to the same effect as he did you, saying that while various details in regard to preliminary work and packing up of the collection were discussed between us, he did not consider it in light of a definite promise” and ended the letter, “It is with much satisfaction that I see from his [Hatcher’s] letter his views and yours are in complete accord, since my mind was made up to abstain from any relation or connection with another institution, if it should bear the least suggestiveness of ‘trespassing upon somebody else’s preserves’” (VPA, Letter to Holland, June 29, 1903).

On July 1, Holland thanked Franks for the arrival of funds to pay Bayet. “I enclose receipt for \$25,000 which you so kindly sent me. The condition of the reduced rate at which I got the collection is prompt payment and speedy removal.” Holland also explained his decision to go to Brussels, so “that the collection is properly inventoried [sic] and that proper precautions are taken for bringing it

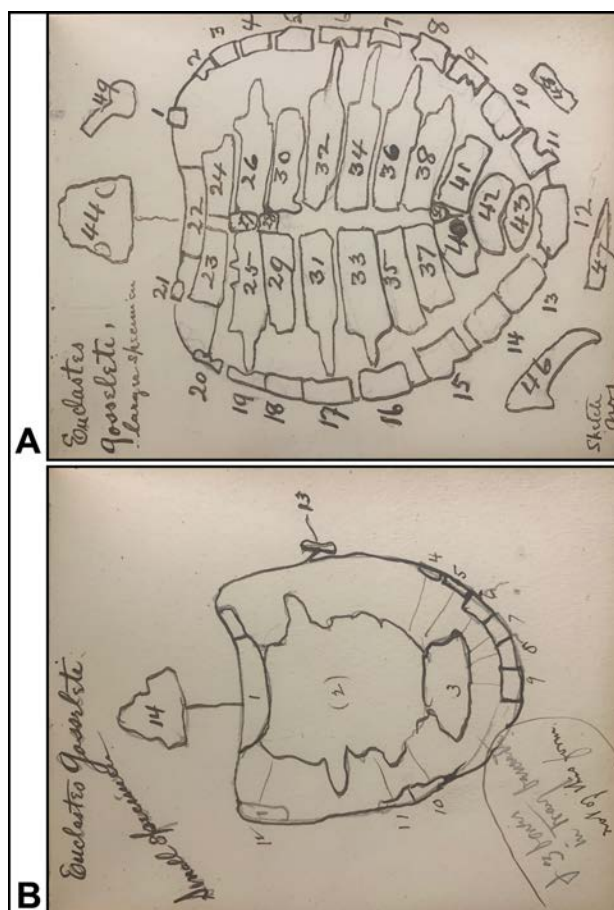


Fig 20.—W.J. Holland's 1903 sketch of *Euclastes gosseleti*. A, “large specimen”; B, “small specimen” (Section of Vertebrate Paleontology archives).

over in such a way that it does not suffer from depredations on the part of those who might be prompted by scientific avarice to withhold from it specimens that are of value” (HA, Letter to Franks, July 1, 1903). It is unclear to whom Holland is referring in regard to “scientific avarice.”

To Krantz, Holland wrote “I will probably reach Brussels on the 17th or 18th of the month via Dover and Ostend. I will be accompanied by Mr. Eastman on my arrival, and I think it would be well for you to meet me at Brussels, as I may wish perhaps to make some arrangements with you in reference to packing the collection.” Holland ended with “I am prepared to make settlement for the collection, but I wish to be satisfied on one or two points before doing so.” (HA, Letter to Krantz, July 3, 1903). One of those points, likely had to do with the Belgian mollusks, and the price paid for them.

To Bayet, Holland emphasized speed. “I am leaving home at very great sacrifice of personal convenience in obedience to the suggestion made in your letter, that you wish this matter brought to a speedy conclusion. I trust that

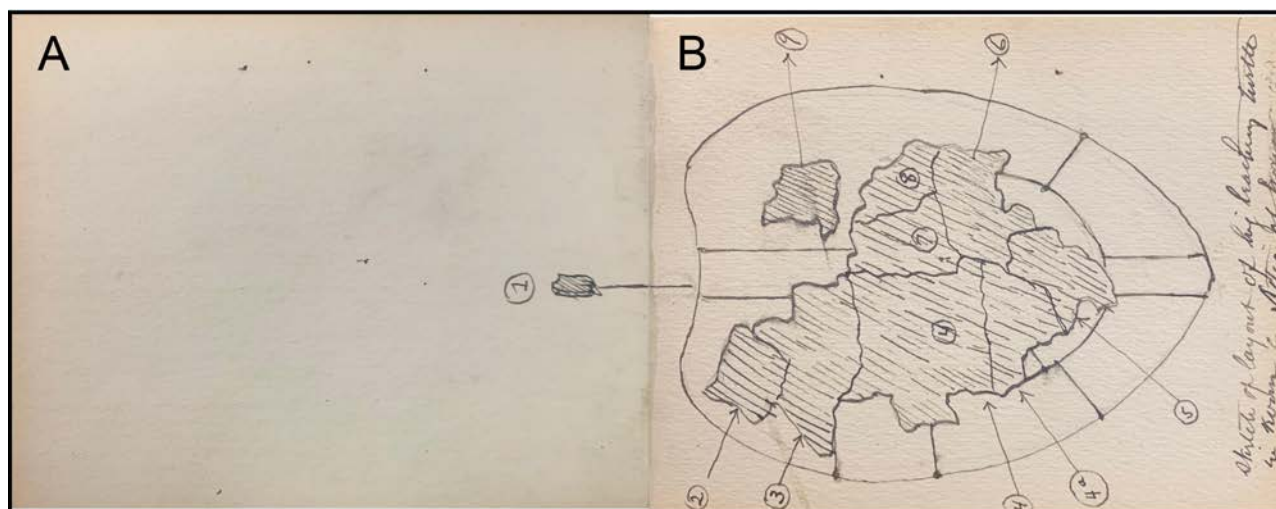


Fig. 21.—W.J. Holland's 1903 sketch of unknown turtle. A, piece number "1"; B, pieces 2 through 8 (Section of Vertebrate Paleontology archives).

you will render me every assistance in enabling me to make arrangements for the packing up of the collection, so that I may not be detained longer in Belgium than necessary, as my business in the United States is of a pressing character (HA, Letter to Bayet, July 3, 1903).

In his letter to Carnegie, Holland acknowledged "For the sake of company, I am taking along with me my boy, Moorhead Holland, who has just completed his sophomore year in college," adding "it occurred to me that a sea voyage might do him good. As I am not well acquainted with him, not having seen much of him for the last two or three years, a sea voyage may give me an opportunity to know more of him" (HA, Letter to Carnegie, July 3, 1903).

While Holland was enroute to Brussels, Hatcher posted a letter with packing advice. "I was very glad to know that you were going over to Brussels to personally look after the Bayet collection. The proper packing of the more delicate skeletons is a most important part of the work and ought not to be left to an inexperienced person. I hope that Dr. Eastman will see that all unlabeled material is carefully labeled. If possible I should like [you] to personally pack all the larger and more delicate skeletons, so as to insure their arrival in Pittsburgh in an uninjured condition. If any material is left after your departure I hope you will take a complete invoice of it, so that we shall know just where we stand. However, I will risk you to look after our interests." Hatcher ended the letter by asking Holland for his "impressions of the collection after having seen it" (VPA, Letter to Holland, July 11, 1903).

Holland and Eastman's trip required a week's travel by steamer from New York, United States to Southampton, England. At some point while travelling on the *New York*, Holland decided to make a quick stop in London. His target was an 1898 inventory of the Bayet collection completed by A.S. Woodward. In October 1898, Woodward had spent five days documenting Bayet's collection for the

British Museum (Woodward 1898). Holland may have decided that Woodward's document was his best insurance against the possibility that someone might "have a disposition to retain desirable specimens for themselves" (DOA, June 29, 1903).

While in London, Holland wrote "[this] afternoon Eastman & I spent at the B.M. [British Museum] with A.S. Woodward & other acquaintances. We obtained from Woodward a list of the Bayet Colln [sic] he had made for the B.M. people, & Eastman & I went to the hotel & copied it. This took till 10 p.m. barring the time spent at dinner. We left London on the morning of the next day" (VPA, Letter to Hatcher, July 27, 1903). By copying the document, Holland meant that he and Eastman created a typed copy, that they eventually brought back to Pittsburgh. Upon his return to Pittsburgh, Holland recalled A.S. Woodward's disappointment that the British Museum missed out on the Bayet's collection and that the price for the Bayet collection was close to what the British Natural History Museum would have paid for "certain choice specimens" (Anonymous 1903t).

Details of the time Holland and Eastman spent in Brussels come from five sources: 1) "Memoranda Concerning the Bayet Collection," a 19-page sketchbook created by Holland, 2) Letter from Holland to Hatcher dated July 27, 1903, 3) Inventory of the 259 boxes packed in Brussels titled "LIST OF BOXES", 4) Comments made by Holland in his role as editor, years later, in scientific papers published by *Annals of the Carnegie Museum*, and 5) Newspaper articles featuring interviews with Holland.

Regarding his meeting with Bayet, Holland noted "went by Dover & Ostend to Bruxelles, arriving at 6 p.m. After dinner I called on the Baron, but he had already retired (9 p.m.). He called at our Hotel [sic] the next a.m. & told me he was ready to have me come & inspect the Collection. This I did spending the forenoon with him & leaving

Eastman & my son to their devices. I thought this best. I arranged to begin packing on Monday, today a week ago. On Sunday evening we dined with the Baron & Baroness & some of their friends, all barons & baronesses, (10 kinds of wine & toothpicks at table) – Moorhead [William Holland's son] was the silent partner, his knowledge of French being purely Princetonian" (VPA, Letter to Hatcher, July 27, 1903).

Upon returning to Pittsburgh, Holland informed the press that "The baron desired to reserve from the sale the fossils of Belgium, his own country," then added "When I met the baron in Belgium, and saw his collection I told him that it was all or nothing, 'tout ou rien,' that if I bought the collection I wanted it all. We closed the deal" (Anonymous 1903t). A Belgian newspaper would later add that "Mr. Holland is pleased with the very satisfactory result of his delicate mission and he declares that when he writes his own biography, it will include the chapter of 'His twenty-one days in a Baron's carriage houses', – because the superb collection of fossils was largely housed in the house itself and in the Baron's stables, where it occupied no less than eight large rooms, all crowded with curious specimens and transformed into a veritable museum" (Anonymous 1903q).

Concerning Krantz, Holland noted "Monday we got to work with the help of Krantz's two men whom he had telegraphed for, Krantz himself having turned up on Saturday p.m. By request of the Baron I paid Krantz his Commission on Monday & he went back to Bonn at noon on Tuesday" (VPA, Letter to Hatcher, July 27, 1903).

While in Brussels, Holland created a title "Memoranda Concerning the Bayet Collection" (Fig. 12). This book is also known as the "Holland Sketchbook." The nineteen page, 11cm x 14cm x 1cm, book holds nineteen pages of sketches and notes. The first eighteen pages are continuous, followed by a series of blank pages and then a final drawing, a portrait, located at the end of the book. Dawson considered it possible that this final drawing was of Ernest Bayet (Dawson and McGinnis 1972; Fig. 13).

In between the first and last pages of the Holland Sketchbook are a series of notes and drawings about specimens and their location on Bayet's estate. Holland intended the sketchbook to assist inventory and repair once the collection arrived in Pittsburgh (VPA, Bayet Collection, 1903).

Floor plans and descriptions of the coach house and attic cover eight pages (Figs. 14A–B, 15A–B, 16A–B, 17A–B). Holland made meticulous drawings of the rooms where Bayet's fossils were stored. According to Holland, Bayet stored his fossils on three floors of a "remise," also referred to as his "coach house." Additionally, Holland noted fossils stored in Bayet's attic – which appears to be the top floor of Bayet's main residence. Holland's notes provide intriguing observations about Bayet's fossil system and room details. Amongst other comments, of the ground floor coach house, Holland said "tall cabinets surrounding the room filled with slabs of *Ichthyosaurs* etc., & Monte Bolca plants" (Fig. 14A). Concerning the second floor, he noted, "cabinets with

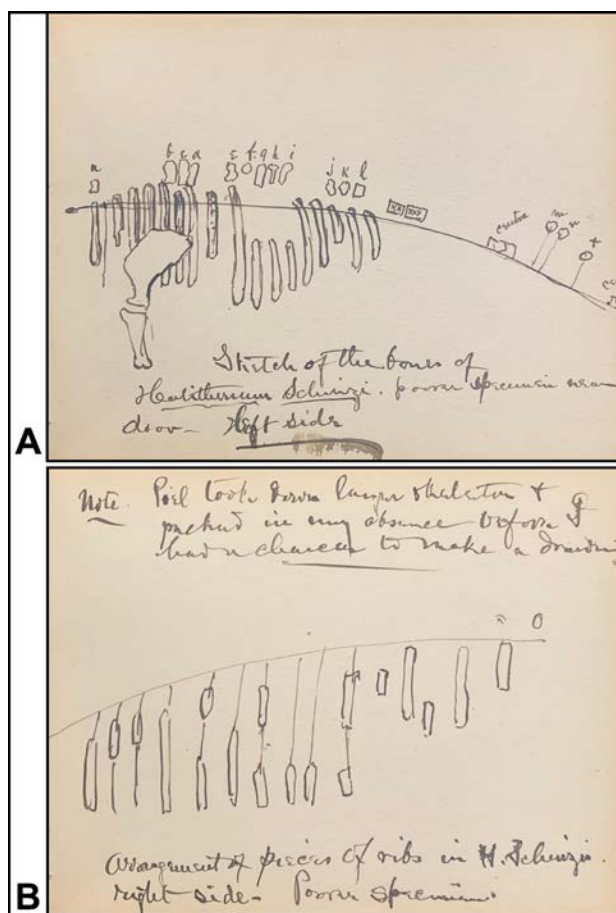


Fig. 22.—W. J. Holland's sketches. A, "Sketch of the bones of *Halitherium schinzii*" left side; B, "Arrangement of pieces of ribs *Halitherium schinzii* right side" (Section of Vertebrate Paleontology

flat shelves," "cabinets back to back," and "small show cases under windows" (Fig. 15A). Of the third floor, Holland said "skylights in the roof" (Fig. 16A).

Holland also made sketches of *Mosasaurus lemonieri* (Figs. 18A–B, 19), *Euclastes goselete*, (Figs. 20A–B), unknown turtle (Fig. 21), and a sea cow, *Halitherium schinzii* (Figs. 22A–B). Holland created the drawings of *Mosasaurus lemonieri*, *Euclastes goselete*, and *Halitherium schinzii* to assist putting them back together in Pittsburgh. "I made sketches; of the most difficult things in situ & numbered the bones & put nos. on the parts" (VPA, Letter to Hatcher, July 27, 1903). Holland expressed a moment of humor while sketching the *Mosasaurus*. In Fig. 19, he noted, "[*Mosasaurus* vertebrate] 20 is a fragment lying at bottom on the stand." Holland would later write "the *Mosasaurus* is composed of extremely fragile material. I broke the ribs & packed the pieces in cotton. The mere pressure of a finger broke them. They will, I hope, ride well, but will have to be put together again. The skull causes me anxiety" (VPA, Letter to Hatcher, July 27, 1903). Later Holland would add "We have taken every precaution possible

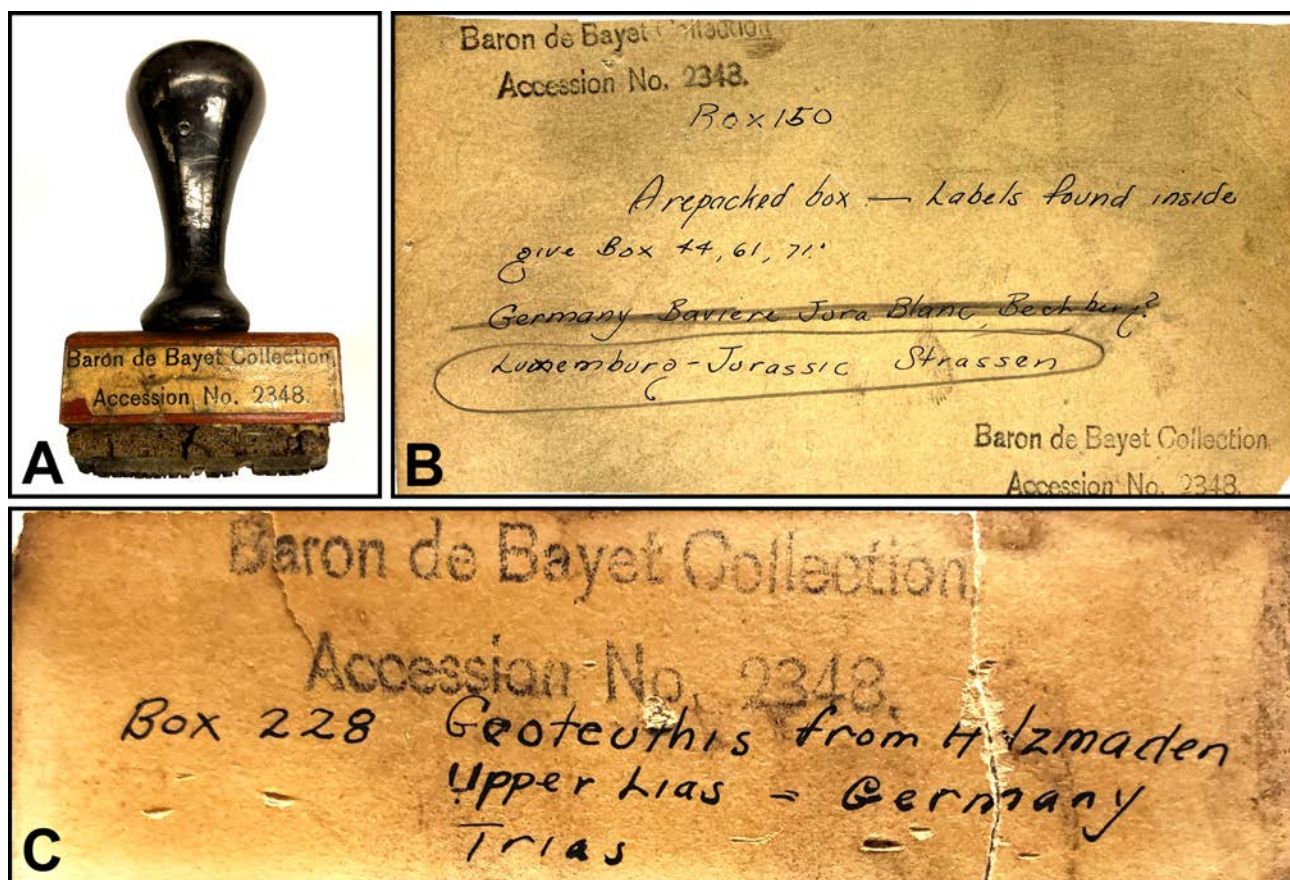


Fig 23.—Carnegie Museum Baron de Bayet stamp and box labels. A, Section of Invertebrate Paleontology Bayet accession stamp; B, box label #150; C, box label # 228.

& I believe, barring some great accident, such as a railroad smashup, the stuff will go through all right" (VPA, Letter to Hatcher, July 27, 1903).

Holland's handwriting deteriorated as packing proceeded, but his attention to detail remained. Of room C, in Bayet's attic, he remarked "showcase with big turtle" (Fig. 17A). If you look closely at the sketch associated with the description (Fig. 17B), a turtle appears in the center of room C, and it is the very turtle that he sketched (Fig. 21). Holland described this specimen as a "big leathery turtle Room C." Holland placed piece "1" on the left page, and pieces "2–8" on the right (Fig. 21).

Holland's written words offer details about Bayet and his collection. "The Collection [sic] is immense. It fills 8 or 10 rooms chock full. There is hardly standing room in some of the apartments," and later "you may imagine my dismay. It may take 200 or more boxes to contain the collection & several years to catalogue & properly determine it" (VPA, Letter to Hatcher, July 27, 1903). In the end, Holland's crew of fossil packers assembled 259 boxes of fossils (IPA, Baron de Bayet Correspondence, Box 2). Upon his return from Europe, Holland sized up the collection

another way. "It [the Bayet Collection] is contained in 258 boxes, which weigh about 30 tons and will fill a number of freight cars [from New York to Pittsburgh]" (Anonymous 1903s). Note: Holland references only 258 boxes in this quote, as for a brief time, Eastman retained one box in Europe.

Pertaining to packing, Holland recorded "Today we have 49 boxes packed including the most fragile things. This part of the work has gone somewhat slowly as the taking down of the mounted skeletons called for extreme care. I did the bulk of the work with my own hands," and added, "I do not see daylight ahead of me yet in this work," followed a bit later by "Much of the material consists of invertebrates. We packed eleven large boxes of ammonites today & there will be four or five more" (VPA, Letter to Hatcher, July 27, 1903).

Eastman and Holland worked long hours in Brussels. Holland reported that he used "a small army of packers, which at one time numbered no less than twenty men and women" (Anonymous 1903q). Upon his return, Holland would add "the work of packing the collection consumed three weeks. I telegraphed Dr. Krantz at Bonn to send

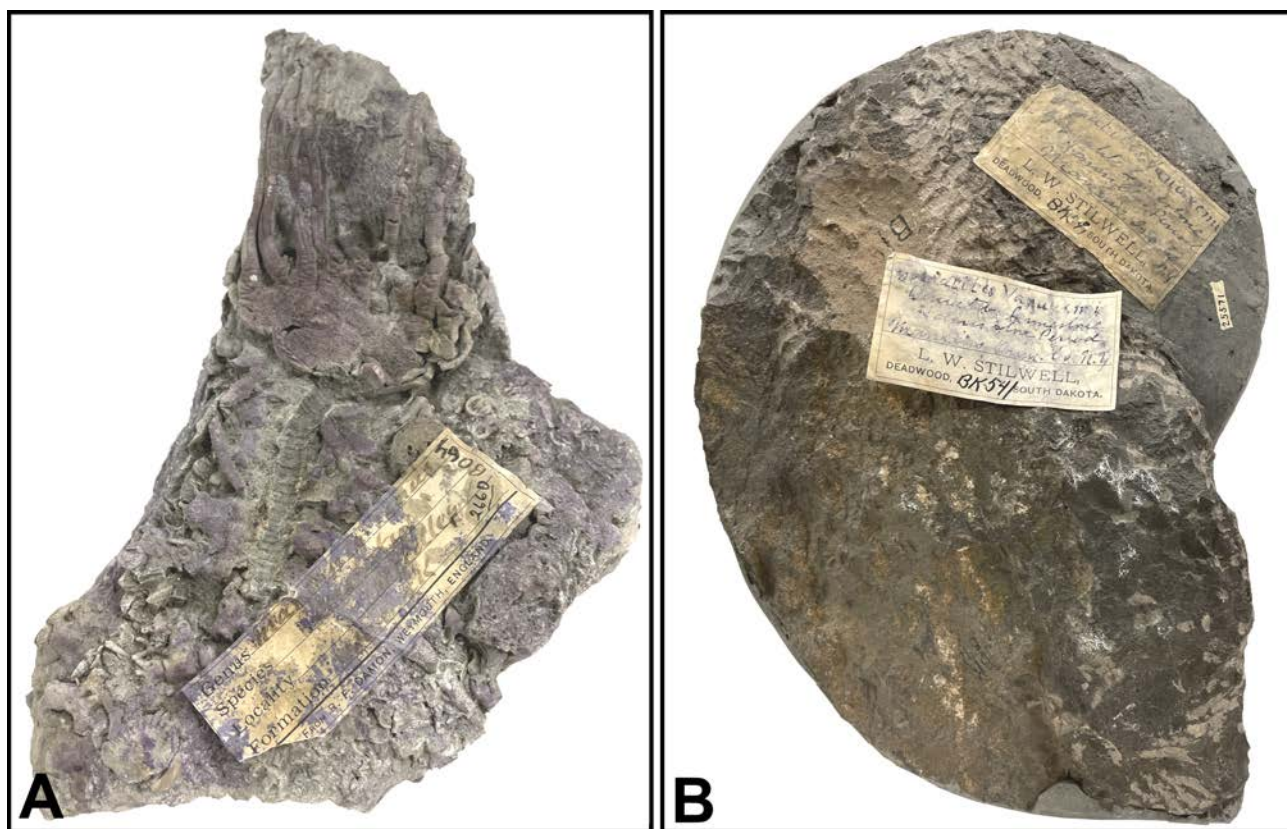


Fig. 24.—E. Bayet fossils with water damaged labels. **A**, CM 53644, R.F. Damon *Marsupicrinus*, Silurian, Dudley, England; **B**, CM 25571, L.W. Stilwell, *Agoniatites*, Devonian, New York, USA.

me two of the best packers in his establishment, which he did,” and continued “I soon found that to pack up the entire collection would require, if only four men devoted themselves to it [Krantz’s packers plus Holland and Eastman] that a great length of time, and I therefore gathered together a number of persons who were skillful packers of small objects, and rapidly got the collection into shape to be put into the packing cases.” Holland verified the L’Etoile Belge account that “men and women” assisted packing smaller specimens by “wrapping each specimen, together with its label in a paper, and doing up the specimens in larger parcels” (DOA, September 9, 1903).

Years later, Holland reminisced:

“Specimen [*Rhinobatus bugesiacus*] has undergone and survived great dangers. One evening in Brussels, when the writer was engaged in packing up the collection of Baron Bayet for shipment to Pittsburgh, the hour being late, he gave orders that no more specimens should be brought down from the upper floor of the remise where they were stored, and that work should cease for the day. Two of his overzealous assistants disobeyed, and, going up to the loft, attempted in the darkness to bring down this heavy and almost priceless slab. Descending the stairs in the dim light they stumbled and came rolling down the steps with their

burden, which fell, as was shattered into scores of fragments upon the pavement of the lower court. The packers were instantly ordered from the spot, and sent away for the night. By the light of a lantern the writer, assisted by Dr. Eastman, worked until nearly midnight, succeeded in gathering up the fragments, fitted them together, and then laying a large sheet of transparent paper over them made a careful tracing of their outlines, designating each piece by a number corresponding to numbers placed upon the tracing. On the following morning the pieces were carefully packed in cotton and together with the tracing were brought to America. With the outline before us, the writer, assisted by Mr. O.A. Peterson, succeeded in adjusting each bit to its place, and no one unacquainted with the fact, would imagine that at one time this noble specimen had lain a mass of comminuted fragments upon the pavement of a Belgian court-yard. It is in every way as good as if it had not been “smashed into smithereens” (Eastman 1914).

Holland and Eastman made early determinations about specimens of value. “The Solnhofen things are very fine & so are the things from Monte Bolca. Eastman thinks there are a number of undescribed fishes. We have thirteen or fourteen *Pterodactyls* & *Rhamphorhynchi*. There are only

4 or 5 in America now. Our collection in this regard lays over all others in America. Some of the specimens are unusually fine. Krantz values the one from Holzmaden at \$2000. — Only one other specimen from the Lias exists in museums, & ours is the finest of the two. We have two *Holitheria* one more or less fragmentary, the other better. Both are mounted. I shall bring along all mounts, & with my personal knowledge of the specimens shall be able to quickly set them up when the time comes.—” (VPA, Letter to Hatcher, July 27, 1903).

In regard to value for Pittsburgh, Holland observed “of course there are many things of small value, but all is new to our collection. There is a bulky lot of Solnhofen insects & Crustacea,” and “unfortunately labels are in great confusion. We are doing our best to get things to rights in a general way, but there will have to be a lot of study spent upon it. In some cases the mice have eaten up the labels, mostly of locality. — I am well pleased with the collection, however, as a whole and am sure you will be also” (VPA, Letter to Hatcher, July 27, 1903).

Two prominent scientists crossed Holland’s path in Brussels, Eduard Dupont (1841–1911), Belgian Royal Natural History Museum Director and paleontologist, Louis Dollo (1857–1931). Dupont offered Holland one explanation for why Bayet’s collection had not been placed in a Belgian museum, remarking that “the Baron offered it [his collection] to the Belgian government as a gift upon condition that they would erect a Museum, or a wing of the Royal Museum to be called the Musée Bayet, but this fell through as the government did not find the way to appropriate the money” (VPA, Letter to Hatcher, July 27, 1903). Dollo stopped by Bayet’s residence multiple times to observe packing. Of those visits, Holland noted “Dollo is very obliging, but a trifle sore that the colln [Bayet collection] goes to America. I have seen a good deal of him” (VPA, Letter to Hatcher, July 27, 1903).

While in Brussels, Holland also had lunch with King Leopold II. He remarked “the King invited me to lunch with him last Tuesday. I went of course & had a good time at the palace” (VPA, Letter to Hatcher, July 27, 1903). Upon his return, the *Pittsburgh Leader* reported “While Dr. Holland was in Brussels, he was the object of much social attention, and was invited to take luncheon with the King of Belgium” (Anonymous 1903r).

Before departing Brussels, Holland agreed to let Eastman keep one box “#258”, titled “Specimens entrusted to Eastman for Study. See special list and receipt. Express to Paris” (IPA, Baron de Bayet Correspondence, Box 2). One specimen, a fossil bird from Narbonne, France, would, amongst other issues, raise future tensions with Hatcher.

Also included in Eastman’s box were fossil fish from Monte Bolca. Upon his return to the United States, Holland remarked that Eastman had been “entrusted” to travel to Paris with “certain portions of the collection of [Bayet] fishes” in order to compare with “the celebrated Gazzolo [sic] collection” (Anonymous 1903s). Holland hoped Eastman’s effort would reveal “new species of fish” within the

Bayet collection (DOA, September 9, 1903). Count Giovan Battista Gazola (1757–1834) was a collector of many items, including fossil fish. According to Luigi Capasso, Gazola “can be considered, without a doubt, the most important collector of fossil fish of his time” (Capasso 2014).

Back in Pittsburgh: August 28, 1903–Early January 1904

After just over six weeks away, Holland returned to New York on August 22, 1903. He later told the press that while travelling by steamer, he completed “100 pages of a new book upon the matter of North America” travelling to Southampton and “50 pages coming back.” A typewriter was placed on board for his use (Anonymous 1903s). Before returning to Pittsburgh, Holland spent a few days with his family in Magnolia, Massachusetts (Anonymous 1903s).

Within days of Holland’s return to Pittsburgh, Hatcher expressed displeasure that Eastman retained fossils in Europe. Anticipating friction, Holland wrote Eastman a letter of warning.

“Hatcher turned up today. He is in a very peculiar frame of mind, & seems to think that my having gone over to get the collection was an affront to him. He is white-hot about my having allowed you to take that bird to Paris, & I must beg you not to describe it, & above all not to say anything to him about the very pleasant suggestion you make in your letter to let my name be a part of the generic name. The fact that Hatcher had promised you to describe the fishes he admits, but he says that for me to have allowed you to take the bird, without consulting him, was to trench upon his ‘sovereign rights’ as Curator of Paleontology. So you will oblige me, for the sake of peace, if you will not do anything about that miserable fragment of a bird. The man is very jealous of his prerogatives & of his supposed dignities” (VPA, Letter to Eastman, August 31, 1903).

The next day, and before Eastman had received Holland’s letter of caution, Eastman wrote Hatcher about the fossil bird in his care and of his future travels to “Munich and British Museums before returning to Cambridge” (VPA, Letter to Hatcher, September 1, 1903).

On September 5, 1903, Holland wrote Eastman a second cautionary letter.

“I wrote you a few days ago earnestly exhorting you not to undertake to describe or publish description of a certain *rara avis* in your possession. My valued colleague feels that while he is prepared to stand by his decision to allow you to write up the fishes, I was invading his sphere when I entrusted that small mashed-up skeleton bird to your care. Study it as long as you please, but make out of it all that you can, but do not fail to report your observations to the head of the section of paleontology [Hatcher].” Holland added, “From this time forward, Mr. Hatcher having again returned to his office, it would be best for you to communicate with me in all matters touching the work of the section of paleontology through him, the recognized head of that

FUND RECEIVED FROM MR. ANDREW CARNEGIE FOR
THE PURCHASE OF THE PALEONTOLOGICAL COL-
LECTION OF BARON E. DE BAYET.

DR.

1903.

July 1. To Cash received from Mr. Carnegie.....\$25,000.00

1904.

Mch. 28. " Interest on Daily Balances..... 50.90

Total\$25,050.90

CR.

Mch. 28. By Paid for Collection and Expense of Pack-
ing and Transporting same from
Brussels to Pittsburgh.....\$23,366.36
" " " " Haugh & Keenan, Storage Charges. 118.80
" " " " S. K. Patterson, Hay to Repack part
of Collection after Fire..... 7.50
" " " Transferred to Fund for Restoration of
Diplodocus 1,558.24

Total\$25,050.90

The foregoing account has been examined by us and found
to be correct.

JOHN D. SHAFER,
S. H. CHURCH,
Committee of Audit.

Fig. 25.—Carnegie Museum final accounting of E. Bayet purchase (Holland 1904).

section. Do not understand that I wish to to [sic] terminate any manner the pleasant and cordial relations which were agreeably formed during our weeks of travail in Brussels, but as Mr. Hatcher is the recognized head of the section of paleontology all communications bearing upon the work of the section will naturally come to me through him" (VPA, Letter to Eastman, September 5, 1903).

On that same day, Hatcher wrote Eastman about expectations.

"Dr. Holland has handed me the list of the contents of the boxes of the Bayet collection and has given me a little information as to the arrangements entered into between you and him regarding your work in connection with this collection. I notice in looking over the list of contents of boxes a considerable number are marked to be sent on to you for study, I also notice that you have retained and now have with you in Paris for study and identification a considerable number of specimens. Before publishing any descriptions of this material, I wish it to be sent here to the museum that it may be properly catalogued and that in all your descriptive work and figures each specimen shall be referred to by its proper museum number so that there may be no question in the minds of future students as to just what material you had in mind when you were writing your descriptions. This is a rule that I have made and rigidly enforced ever since I came to Pittsburgh and there must be no variation from it. You will, I am sure, see how important it is to definitely fix all such material. In your letter to me you said nothing about your plans of work and all that I know I have had to learn from Dr. Holland. Since I have to report on the work of my department to the director of the museum your reports should come to me, and I will thank you if you will write me giving me a list of the materials you have in your possession, informing me as to the progress of your work and telling me when you will be ready to forward this material to the museum to be accessed and properly catalogued" (HA, Letter to Eastman, September 5, 1903).

Six days later, Hatcher wrote another letter to Eastman requesting "to see you [Eastman] on your return to America as I wish to talk over some matters with you that we may arrive at some definite understanding concerning some questions about which there would seem to be some differences of opinion" (VPA, Letter to Eastman, September 11, 1903).

Realizing Hatcher was displeased, Eastman wrote three letters to Hatcher and one to Holland. To Hatcher, Eastman wrote, "I regret that any misapprehension should have arisen on account of my having taken with me a fossil fowl to Paris in addition to a select lot of fishes, and I certainly would not have done so had I supposed you would be offended" (VPA, Letter to Hatcher, September 11, 1903). Followed by, "have just received your [letter] of the 5th, inquiring about the Bayet material in my hands, and requesting me to report to yourself on all matters relating to the Department of which you are chief, as of course I am very glad to do" (VPA, Letter to Hatcher, September 18,

1903). And finally, "I will ship on to you shortly the remaining Bayet and other purchased fishes; with statement of expenditures &c., and will arrange to pay you a visit at Pittsburgh directly on my return" (VPA, Letter to Hatcher, September 25, 1903).

Hatcher replied "I thank you for the list of material sent and am much interested in all you say concerning your work on the Bayet collection" (VPA, Letter to Eastman, September 28, 1903).

To Holland, Eastman wrote "Your pleasant letter of the 31st and also one from Hatcher, have just reached me, and to relieve any misapprehension I cabled you at once – 'Returning bird undescribed.'" (VPA, Letter to Holland, September 11, 1903).

Back in Pittsburgh, Holland exuberantly wrote Carnegie about the Bayet collection. He emphasized Eastman's preliminary findings on the fossil fish. "There are a number of species [fish] which are new to science, and that as a whole the specimens we have obtained are better than the types which Agassiz [Louis Agassiz] had when he wrote his immortal work upon the fossil fishes." Later adding, "I call this simply fine, I do not know what you think of it, but I think that the scientific world will be rather astonished to know that in grimy old Pittsburgh we are taking up and revising and finishing the work of so distinguished a man as Louis Agassiz" (HA, Letter to Carnegie, September 28, 1903).

On September 2, 1902, Holland contacted Haugh & Keenan about storage of the Bayet collection in a building on "Third St & Duquesne Way," downtown Pittsburgh. Holland wrote:

"Confirming what I said in conversation with one of your representatives in your office to-day at noon, I desire to say that there is arriving in the city of Pittsburgh, by P.R.R. [Pennsylvania Railroad], in bond, a collection which I have recently purchased in Belgium for the Carnegie Museum, which is contained in 258 boxes of various sizes. The collection consists of stones – fossils, carefully packed so as to insure safe carriage. All of the boxes, with very few exceptions, can very easily be handled by two men. Perhaps half a dozen require more men to handle them properly. A considerable proportion of this number of boxes it will be necessary for me to store pending the construction of the additions now contemplated to the Carnegie Museum. I write to ask you to quote me the best rate at which you will store these boxes, according to space, or according to room. I estimate that they can be piled on a space at the outside 20 x 40 feet square. Thus piled they would probably be allowed to remain for a year or more. I may say that I desire to have this collection, if committed to you, stored at your warehouse corner of Third St. and Duquesne Way. I do not under any conditions care to have them placed in any other storehouse in a distant part of the city. The goods may be expected to arrive at almost any time over the Penna. R.R., and therefore an immediate answer to this letter, enabling me if possible to make arrangements with you, will be valued, as we can have the

cars, in case I decide to entrust the storage to you, switched to your warehouse from the Penna. Freight station without unnecessary delay and breaking of bulk” (HA, Letter to Haugh & Keenan, September 2, 1903).

Hatcher showed up at Haughs & Keenan, in person, to watch the unloading and placement of the Bayet materials. In total, 210 boxes were stored downtown and the remaining 48 boxes were brought to the Carnegie Museum. Holland explained that the crates brought to the museum contained “mainly the collection of fishes, which Professor Eastman desires to study and which, after it has been accessed, will be sent to him at Harvard, or which he will study here, as arrangements for so doing may be subsequently made.” Holland inserted a line about breakage. “I am happy to report that the collection appears to have arrived in good condition, with no more breakage than might be expected, in such cases” (DOA, September 30, 1903).

By fall, Hatcher discovered that Eastman continued to purchase fossils for Carnegie Museum, when Krantz wrote about a new “suite of Bolca Fishes” that “Mr. Eastman has selected himself each exemplar for you” (VPA, Letter to Hatcher, October 6, 1903). A few weeks later, Holland sent Eastman a letter of reprimand.

“Professor Hatcher has shown me your letters of September 25th and October the 10th. I am also in receipt of a letter from you written toward the end of September, which I have been too busy up to the present moment to reply to, for which neglect, you will have to pardon me. My attention is called by Mr. Hatcher to the fact that you have shipped to us two boxes of fossils, one small box containing material you purchased from the Deyrolles [Émile Deyrolles (1839–1917)], and the other a larger consignment which you purchased from Krantz. For the purchase of neither of these collections had you received authorization from myself, and I understand from Mr. Hatcher that he had not instructed you to make these purchases. While I have no doubt that your selection represents valuable material which ought possibly to be in our collection, nevertheless I wish very much that before shipping the specimens to us in this way you had consulted with Mr. Hatcher or myself, and I trust that you will not send us any more collections unless you have received authority to purchase them. I understand that in the case of the second lot – the one purchased from Krantz – you have expressed willingness to take it off our hands if we do not wish it, and they are practically sent on approval. Nevertheless, I cannot but regard your step in sending it to us without any word of conference as somewhat unbusinesslike. In these days of rapid communication it is always possible for you to ascertain within comparatively a short time what our purposes and wishes are I am free to say that this shipment calls for an expenditure that we had not arranged for at the present time nor contemplated. Neither Mr. Hatcher nor I are able to approve your action in having sent these things without having given us any intimation of your intention to do so.”

“In reference to our furnishing the means to illustrate

a paper written by yourself, upon material that you have unearthed at the Museum of Natural History in Paris, I can only say that it is entirely out of the question for us to do this. If designed [sic] to illustrate a paper published in the publications of thid [sic] institution, we would cheerfully furnish the money, but we are not in a position as an independent museum to undertake to illustrate the publications of another museum, and you may dismiss at once summarily from your mind all idea of our cooperating in that way. My understanding with you was that whatever you published in reference to these fishes was to be in the publications of the Carnegie Museum, and it was with that understanding that I employed your services, that you might obtain preliminary information which would enable you to write intelligently upon this subject. The money that I gave you when I was with you in Brussels, and the money which I sent you since my return, all was given by me with the distinct understanding that it covered the necessary expenses which were preliminary to the preparation of a paper by you upon the Bolca and other fishes which is to be published by the Carnegie Museum. I think there is no misunderstanding on that point. I very much appreciate the importance of the discovery you have made in connection with your researches in Paris, but I think it is wholly out of the question for us to undertake with the funds of the Carnegie Museum to illustrate the publication of a sister institution. We would not ask any other museum to do this for us, and I do nto [sic] think they should ask us to do it for them” (HA, Letter to Eastman, October 19, 1903).

On November 3rd, Eastman replied “I am duly in receipt of your valued favor of Oct. 19, and beg to assure you that I have in nowise obligated your museum to accept any material beyond that purchased by me out of a fund of \$100 – which was entrusted to me for the purpose by Mr. Hatcher” (VPA, Letter to Holland, November 3, 1903). Eastman added that “some specimens were apparently included in the Carnegie shipment which I had selected for Harvard” and that he had “hoped to do your institution a favor by allowing it to have first choice of the extra specimens sent on approval (that is, over and above the amount placed in my hands to expend in order to fill out a few important lacunae in the Bayet Collection; and I have had still other excellent and great reasons for wishing you and Mr. Hatcher to see this material, even if it went elsewhere eventually” (VPA, Letter to Holland, November 3, 1903).

The Fire

At 6:00 a.m. on December 29, 1903, a fire broke out in the six story Haugh and Keenan warehouse. Early newspaper reports painted a grim picture “Carnegie Museum may loose [sic] considerable on its Bayet collection of fossils, which were stored in the building for want of room at the Carnegie Institute Building [sic]” (Anonymous 1903w). Thirteen fire engine companies battled the fire for over twelve hours on Third Street and Duquesne Way. Fire-

fighters struggled to contain the blaze due to the difficulty of opening steel shutters and doors (Anonymous 1903x). "The Director reported that the Haugh & Keenan storage warehouse had been badly damaged by fire, and that the Bayet Collection which is stored there had been thoroughly wet but not burned and he hoped had escaped serious damage" (Minutes of the Carnegie Museum Committee, January 3, 1898–April 1, 1905). Holland was at the scene of the fire and upon discovering the fire was located on the lower floors, requested that "plenty of water" be used as "he was willing to take his chances in dealing with water rather than fire." Holland later said that "he was convinced that half of the Allegheny river [sic] had been through there." Once the fire was contained, Holland entered the building, going through the building with police and firefighters through "darkened rooms where no light could reach except by the flaming torches of firemen" (Anonymous 1903aa). Word of the fire reached newspapers across North America and beyond. *The Baltimore Sun* reported the blaze moving, "from the fifth floor to the sixth floor and from the fifth to the third floor" (Anonymous 1903w), while *The Victoria Daily Times*, British Columbia, the *Portage Daily Register*, Wisconsin, and *The Daily Telegraph*, London echoed early reporting that "the Carnegie Museum may lose considerably on the Bayet collection of fossils" (Anonymous 1903y, 1903z, 1903bb).

In the end, "it was necessary to relabel a considerable number of the specimens owing to the wetting they had received at the time of the fire." However, Holland noted that "aside from the dampening of the labels they received no injury whatever" (Holland 1904). Figures 24A–B show water damaged labels within the Bayet collection, that could be the result of water poured into the Haugh and Keenan warehouse to contain the fire. After the fire, the Bayet collection was "brought to the Museum [sic]" (DOA, January 30, 1904).

By early 1904, and possibly because of the fire, Holland devised a long-term storage plan for Bayet's fossils. He ordered "a thousand trays to be made of a suitable standard size." He also "designed a series of cabinets" that would fit, "in the new quarters of the Section of Paleontology in the enlarged building [1907 museum expansion]." Price for the trays was "one thousand and fifty dollars" and the cabinets "at least as much" (DOA, January 30, 1904). Based on IP archival materials, the trays were likely constructed of black metal.

Fallout with Eastman

Having returned to the United States by early December 1903, Eastman wrote Holland a letter on Colonial Express stationery indicating that he "was on his way to Pbg[h] [Pittsburgh], with the hope of coming to an amicable settlement with Mr. Hatcher of some differences we have had over a very trivial matter in itself, but which he seems to have worked himself into quite a heat about." Eastman

requested a meeting with Holland at the Union Club for the following day at 1:00 p.m. even if, "he [Hatcher] declines to see me" (VPA, Letter to Holland, December 30, 1904). Holland and Eastman spoke, as Hatcher's next letter refers to their conversation.

On January 1, 1904, Hatcher irritably wrote "During my conversation with Dr. Eastman yesterday afternoon he informed me that you told him yesterday that I was afraid you would discharge me to make room for him & you have on two occasions implied as much during your conversations with me." Hatcher summarized his value to the department before proclaiming "I think you have done me an injustice, though I hope it was unintentional, in making this statement to Dr. Eastman, more especially in view of all that has lately transpired between us. If you really believed that I was apprehensive would it not have been better to have treated it as a "family" matter not to be discussed with outside parties? I would be thankful for a withdrawal of this statement & assure you that I have no such feelings" (VPA, Letter to Holland, January 1, 1904).

On January 8, 1904, Holland wrote a final exasperated letter to Eastman.

"In all candor I am exceedingly tired of all this conflict that has been going on between yourself and the head of the section of paleontological research in this Museum, my esteemed friend Mr. Hatcher. When I returned from Europe in September I definitely wrote to you telling you that from that time forward your correspondence in relation to all matters concerning the paleontological work of this Museum would have to be carried on with Mr. Hatcher," adding, "If you cannot arrange amicably with Mr. Hatcher to do the work which you desire to do, then some other person will have to found to do it." Holland denounced Eastman for feigning Hatcher's approval to go to Brussels, back in June, "...you have frequently grossly misrepresented matters, first to me, when in June you wrote me as to your arrangements with Mr. Hatcher. You had no such understanding with Mr. Hatcher, and I have positive evidence of the fact." Holland ended, "I have lost faith in you, Mr. Hatcher has lost faith in you, and for all this you are simply yourself responsible because of the devious methods you have pursued in your dealings with us. You have not been straightforward as you out to have been. You have my ultimatum. If you can arrange matters on a basis that is satisfactory to Mr. Hatcher, well and good. If not, you need not appeal to take up my big club and compel him to do your bidding. I will not do that" (HA, Letter to Eastman, January 8, 1904).

By the end of January 1904, Holland admitted that he "had to break off all relations with Professor C.R. Eastman, of Harvard University," adding "The relations between Mr. Eastman and Mr. Hatcher were so strained that I found it practically impossible to keep the peace," but Holland wavered, "I am quite certain that Mr. Eastman is probably the best man in the country to undertake the work, but his peculiarities, coupled with the peculiarities of the Curator of Vertebrate Paleontology in this institution, are such as

to make a yoking of the two together into a working team manifestly impossible” (DOA, January 30, 1904).

Aftermath

Of the seven key players orchestrating the Bayet sale in 1903, only Robert A. Franks would outlive Bayet, and then, only by a mere six weeks (Ancestry.com 2016a).

Hatcher passed away from typhoid on July 3, 1904. After his death, Holland appointed himself Curator of VP.

Eastman returned to Carnegie Museum with British paleontologist, A.S. Woodward two months after Hatcher’s passing. After the visit, Holland remarked that he “had the pleasure of a visit from Eastman and Woodward” and that he “entrusted two fossil birds belonging to the Bayet collection” to Eastman. In the same report, Holland wrote that he was “negotiating with him [Eastman] to take up the work of describing the fossil fishes from Monte Bolca contained in the Bayet Collection” and that “Prof. Smith Woodward has strongly urged the Director [Holland] to do this” (DOA, September 29, 1904). Eastman would not return to study and write about the Bayet fish until 1910 (Holland 1911:14). In July 1913, Eastman departed Carnegie Museum for a second time. “Mr. Charles R. Eastman having completed his work of classifying and arranging our collection of fossil fishes withdrew from service with us, and we understand has taken up similar work at the National Museum in Washington” (Holland 1914:37). While recovering from influenza, Eastman drowned after falling from a Long Beach, New Jersey boardwalk in September 1918 (Holland 1919a).

Andrew Carnegie would live long past the 1907 Carnegie Institute Extension building that increased Carnegie Museum exhibition space fivefold (Kollar et al. in preparation), passing away from possible pneumonia in Lenox, MA on August 11, 1919 (Nasaw 2006:799).

Krantz passed away in 1926 (About Dr. F. Krantz, Rheinisches Mineralien-Kontor n.d).

Holland remained Director of Carnegie Museum until 1922, and then stayed on as Director Emeritus until his death in 1932.

Bayet’s name would reappear, one more time at Carnegie Museum in connection with a new accession number. In June 1904, Carnegie Museum trustees approved purchase of “one specimen of malachite; one specimen of azurite from Cabriere. June 7, 1904” (Holland 1905:52). This purchase became accession number 2542 and the seller was none other than, Baron de Bayet of Brussels, Belgium. A decade later, Bayet would once again contact Holland, this time, in search of a position. Bayet wrote:

“It has been almost eight years since I left Brussels and have been living in Blevio [Lombardy, Italy]. Inaction weighs on me and I should like to ask you if Mr. Carnegie could not use my small services by making me search for fossils, monitor the work, point out the collections for sale” in “France, Germany, Italy, Switzerland, Spain, etc.”

(VPA, Letter to Holland, August 26, [1917–1919]). It is unknown if Holland replied.

Of the \$25,000 placed at Holland’s disposal to purchase the Bayet collection, \$23,366.36 was spent on the Bayet purchase (Fig. 25). The remaining balance was transferred to the “Fund for Restoration of *Diplodocus*” (Holland 1904).

OVER A CENTURY OF INACCURACIES ABOUT BAYET AND HIS COLLECTION

Misconceptions about Bayet and his collection have persisted for over one hundred years. To understand why, it helps to recall the limits of 1903 technology. In 1903, communication transpired primarily through in person conversation, letter, and the occasional telegram. During negotiations for the collection, Holland had a formidable task: spend up to \$25,000, a sum equivalent to over \$785,000 today (Tamisiea 2022), on a fossil collection he had yet to view, and located across the Atlantic Ocean. All available information indicated the situation was an “opportunity as is not likely to present itself again in a hundred years” (HA, Letter to Carnegie, May 9, 1903).

As the 1903 negotiations unfolded, several inaccuracies endured. The most common involve Bayet’s age, collecting timespan, the location of his collection in Brussels, and his title and service in the cabinet of King Leopold II. To this list, we add two more potential inaccuracies – the number of fossils in his collection and motives for selling. Inaccuracy #1: Bayet’s age. – The mistake regarding Bayet’s age, likely started with two letters from Holland to Carnegie in May and June of 1903. In the first letter, Holland referred to Bayet as dead (HA, Letter to Carnegie, May 9, 1903). Then in June, Holland described Bayet as “about sixty-five years of age” (HA, Letter to Carnegie, June 8, 1903). Exactly who relayed the error of Bayet’s age to Holland is unknown, but Holland’s inaccuracy about Bayet’s age, especially the latter reference indicating Bayet was sixty-five, has been printed for decades (McGinnis 1982; Kinnard 1995).

It is likely that Holland realized Bayet was much younger upon meeting him in Brussels; however, no evidence has surfaced that Holland explicitly corrected the record on Bayet’s true age. Bayet’s baptismal registration, marriage certificate, death certificate, and the Belgian Book of the Nobility, all confirm that Bayet was just forty-four years of age when he sold his collection to the Carnegie Museum (State Archives of Belgium 1792–1919; Ancestry.com 2008, 2016b; Coomans de Brachene 1984:185).

Inaccuracy #2: Bayet’s collecting timeline. – After news broke that Carnegie Museum was to purchase the Bayet collection, various newspapers mistakenly reported that Bayet collected fossils for over forty years. For example, the *Pittsburgh Leader* and *Pittsburgh Press* stated that “Baron de Bayet, of Brussels, Belgium has for forty years been assembling what is regarded by paleontologists

as one of the most notable collections of European fossils now in existence” (Anonymous 1903e, 1903f).

After returning from Brussels, Holland corrected the record about Bayet’s collecting timespan remarking that “the Baron was engaged for 30 years in amassing the collection and spared neither time, labor nor expense in getting the best and rarest things” (Anonymous 1903s). To the *Pittsburgh Leader*, Holland added “from early youth, the Baron has been engaged in making his famous collection” (Anonymous 1903r). If you subtract thirty years, from Bayet’s age in 1903, it places Bayet at about age fourteen, when he began collecting fossils.

Inaccuracy #3: Location of Bayet’s fossil collection in Brussels, Belgium. – In early June 1903, Holland mistakenly relayed that the collection was “stored in a rented house” (VPA, Letter to Hatcher, June 10, 1903). Weeks later, Holland realized that Bayet’s fossils were stored on his estate and noted that fact (VPA, Letter to Holland, June 22, 1903).

Inaccuracy #4: Bayet’s title working for the government of Leopold II of Belgium – Over the last century, Bayet’s title has been incorrectly presented in a variety of ways, such as “Secretary of the Late King Leopold of Belgium” (Eastman 1911), “Private Secretary of King Leopold of Belgium” (Carpenter 1932), “Secretary to Belgium’s King Leopold II” (McGinnis 1982), or “secretary to Leopold II of Belgium” (Kinard 1995). Thanks to the Belgian Book of Nobility, we now know that Bayet’s title from 1901–1909 was “Secretary to the cabinet of the King of the Belgians” (Coomans de Brachene 1984:185). Backing up the Belgian Book of Nobility is the Société Royale Malacologique de Belgique, which lists Bayet’s title as “Secretary to the cabinet of the King of the Belgians.” An interview with Holland, while in Brussels, also references Bayet as “secretary to the cabinet” (Anonymous 1903q). Research is ongoing to determine Bayet’s duties while secretary to the cabinet.

Inaccuracy #5: Estimated number of fossils in the Bayet collection. Below are numbers that have been repeated and printed over the last century.

100,000 – The authors have traced the figure of 100,000 to an interview Holland gave to the *Pittsburgh Dispatch* in late August, 1903. The subtitle, in all caps reads “Contains over 100,000 Fossils” (Anonymous 1903v). After the warehouse fire, this total would be repeated in newspaper reports across North America and at least one in the United Kingdom (Anonymous 1903w, 1903y, 1903z, 1903aa, 1903bb).

130,000 – This estimate was cited by Gangewere (2011) as referenced on the Invertebrate Paleontology website (Albert D. Kollar personal communication 2023).

150,000 – This approximation has been traced back to interviews that Holland provided to the *Pittsburgh Daily Post* and *The Pittsburgh Press* to celebrate opening of the 1907 museum expansion. In these articles, the Bayet collection size is approximated at 150,000 specimens (Anonymous 1907a, 1907b).

“Tens of thousands” – this quote dates to 1973. John Carter, Curator of Invertebrate Paleontology who wrote that it “is not possible to say how many individual specimens of invertebrate fossils are to be found in the Bayet collection. One could essay a rough guess of perhaps several tens of thousands” (Carter 1973).

Note: Commencing with this manuscript, IP is challenged to begin an accurate count of Bayet’s invertebrate fossils. The tabulation of specimens, by collector and country of origin, will enhance study of taxonomic biodiversity across the Paleozoic, Mesozoic, and Cenozoic Eras.

Possible Inaccuracy #6: Bayet’s motive for selling his fossils. – In the same letter to Carnegie that mistakenly placed Bayet at age sixty-five, Holland described Bayet as wishing “to purchase a small chalet or something of the sort as residence on the shore of Lake Como” (HA, Letter to Carnegie, June 8, 1903).

Whether or not Bayet actually purchased a chateau in 1903 is unknown. Bayet referred to a “villa on the shores of Lake Como” that he wished to acquire through “Mr. Brentano of Cadenabbia (Italy)” (VPA, Letter to Holland, May 24, [1903]). However, no evidence has surfaced to prove that he bought a property in Cadenabbia, Lombardy, Italy.

Fast forward to 1909–1911, and Bayet did report owning a Lake Como residence in Blevio, [Lombardy], Italy. The Belgian Society of Geology, Paleontology and Hydrology reported Bayet living in Blevio, Lombardy Italy, as of 1909, while the Royal Malacological and Zoological Society of Belgium registered Bayet living in Blevio as of 1911 (Société belge de Géologie, de Paléontologie et d’Hydrologie 1909; Société Royale Zoologique et Malacologique de Belgique 1911). Giancarlo Columbo, naturalist and expert on *Lauriosaurus*, noted that Villa Da Rivas, located in Blevio, Lombardy, Italy, was once owned by the “De Bayet” family (Email correspondence with Giancarlo Columbo 2022). Unfortunately, information available through the Lake Como real estate company, Immobiliare S.R.L., does not include the full name of the “De Bayet” family. It also indicates that the property turned over to a real estate company about 1890, over a decade prior to Bayet selling his collection (Immobiliarecomo.com 2022). Giancarlo Colombo suggested the year “1890” could be a typo. Research is ongoing to determine if Villa Da Rivas, in Blevio, once belonged to the family of Ernest Bayet.

Outside of a chateau purchase, Bayet had three other possible motives to sell his fossil collection.

Motive 1: Fossil clutter and weight. – The *Pittsburgh Daily Post* wrote “and yet it is reported that he [Bayet] was forced to it because his wife was not in sympathy with the storing of such quantities of prehistoric skeletons about the castle” (Anonymous 1903u). While potentially appealing newspaper copy in 1903, this was unlikely the primary motive. However, we do know that Bayet expressed concern about the weight of his collection and informed Holland that “they are too heavy for the building, in which

they are located” (VPA, Letter to Holland, May 24, [1903]) and “the weight of the fossils threatens to bring down my house” (JVPA, Letter to Holland, June 22, 1903).

Motive 2: Changing life circumstances. — Holland reported that “Baron Bayet has always intended to address himself to the task of publication, but his duties as secretary of the royal cabinet of Belgium and the care of his estates have stood in the way” (Anonymous 1903s). Furthermore, Bayet experienced another life changing event in 1903, the birth of a child, Georges-Frédéric-L.-G.-Raymond-Guillaume, April 27, 1903 (Coomans de Brachene 1984:185).

Motive 3: Money. — In a letter to Robert A. Franks, Financial Secretary to Andrew Carnegie, Holland offered a simpler reason behind Bayet’s desire to sell. “The Baron who owned the collection I found was hard up, and needed the money. You know it is possible under such circumstances to push a deal” (HA, Letter to Franks, September 23, 1903).

SUMMARY

Famed Yale paleontologist, O.C. Marsh, described the Bayet collection as a “desirable collection” (VPA, Letter to Holland, August 13, 1903). British paleontologist, A.S. Woodward pronounced it “full of gems” (VPA, Letter to Hatcher, July 27, 1903). And in 2022, science writer, Jack Tamisiea, wrote “Bayet had scoured Europe for some of the most well-preserved vertebrate remains yet discovered, establishing a fossilized menagerie containing everything from giant stingrays to flying reptiles known as pterosaurs,” and added “the bulk of Bayet’s prized collection consisted of creatures without backbones, harvested from many of Europe’s most famous fossil sites. From Jurassic rocks along England’s Lyme Regis coast, he procured curled nautilus and petrified crinoids, an echinoderm whose fossils look like a bouquet of quills baked in a kiln” (Tamisiea 2022).

The quality and quantity of Bayet’s collection brought together Holland, Carnegie, Eastman, Franks, Hatcher, and Krantz and resulted in the Bayet collection’s arrival in Pittsburgh. Holland, Eastman, and Hatcher expressed excitement over the contents and range of new material for Pittsburgh. However, misunderstandings, disagreements, and scientific disputes also ensued. As Matt Lamanna, Curator of Vertebrate Paleontology at CMNH, noted in the forward to writer, Tom Rea’s (2021) *Bone Wars*:

“The truth is, science is a human endeavor. Then and now, science is conducted by people — people with hopes, fears, dreams, egos, grudges, ambitions, jealousy, benevolence, grace, ulterior motives, and the entire gamut of personality traits and emotions that make up the human experience” (Rea 2020:XVIII).

Bayet interacted with some of the most famous paleontologists, mineralogists, and fossil dealers of the late nineteenth century including Robert F. Damon, Friedrich Krantz, O.C. Marsh, and Lucien Stilwell. One hundred

twenty years later, the size and quality of the specimens continue to inspire research, exhibition, and educational science outreach, all, while providing a window into 19th century fossil collecting.

AUTHOR CONTRIBUTIONS

Joann L. Wilson conceptualized and wrote the manuscript, researched the W.J. Holland archives, including Holland’s “Memoranda Concerning the Bayet Collection,” reached out to archivists, librarians, newspapers, online archives, and museum professionals in Europe and the United States, and photographed fossils and labels.

Albert D. Kollar co-lead with the senior author, the discussion that the manuscript be an introduction or part one to the Ernest Bayet story. Reviewed a late draft and recommended the images and figures for the manuscript.

Lucien Schoenmakers translated documents written in French, German, and Italian into English, including century old letters written in indecipherable hand. Lucien also located research resources in European newspapers and archives, plus corresponded with archival and museum staff in the United Kingdom and Europe.

Janet M. Dittmar added historical context, translated documents from Dutch into English, aided with online research in Europe, and provided input on late 19th century European history.

John A. Harper produced all figures.

Suzanne K. Mills assisted with research and discussion about the Bayet collection.

E. Kevin Love transcribed the Carnegie Museum Catalog of Fossils of the Baron de Bayet Collection into the Section of Invertebrate Paleontology Computer Database.

Elizabeth Begley and Victoria Gouza sorted, organized, and analyzed Bayet fossil labels.

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