Charles Henry Gilbert (1859–1928), Naturalist-in-Charge, and Chauncey Thomas, Jr. (1850–1919), Commanding: Conflict Aboard the U. S. Fish Commission Steamer *Albatross* in 1902

J. RICHARD DUNN

Introduction

The name Charles Henry Gilbert (1859–1928) is an important one in the annals of ichthyology and fisheries biology of the American West. A student of David Starr Jordan¹ at Indiana University during the 1880's, Gilbert (Fig. 1) received his doctorate in zoology in 1883, the first such degree ever awarded at that institution. When Jordan was selected in 1891 to be the founding president of the newly established Leland Stanford Junior University in

J. Richard Dunn, 521 Summit Avenue East, No. 202, Seattle, WA 98102, is a retired fishery biologist and a member of the Affiliate Faculty of the School of Fisheries, University of Washington, Box 355100, Seattle, WA 98195-5100.

ABSTRACT-Charles Henry Gilbert (1859–1928) was a pioneering ichthyologist who made major contributions to the study of fishes of the American West. As chairman of the Department of Zoology at Leland Stanford Junior University in Palo Alto, Calif., during 1891-1925, Gilbert was extremely devoted to his work and showed little patience with those of a different mindset. While serving as Naturalist-in-Charge of the U.S. Fish Commission Steamer Albatross during her exploratory expedition to the Hawaiian Islands in 1902, Gilbert engaged in an acrimonious feud with the ship's captain, Chauncey Thomas, Jr. (1850-1919), U.S.N., over what Gilbert perceived to be an inadequate effort by the captain. This essay focuses on the conflict between two strong figures, each operating from different world views, and each vying for authority. Despite the difficulties these two men faced, the voyage of the Albatross in 1902 must be considered a success, as reflected by the extensive biological samples collected, the many new species of animals discovered, and the resulting publication of important scientific papers.

Palo Alto, California, Gilbert was chosen by Jordan to head the Zoology Department. During his tenure at Stanford (1891–1925), Gilbert was a diligent student of fishes of western North America. As a temporary employee of the U.S. Commission of Fish and Fisheries (hereafter referred to as the Fish Commission) at various times, he participated in several expeditions aboard the Commission's Steamer *Albatross* (Hedgpeth, 1945; Dunn, In press; Gilbert²).

Gilbert was compulsively dedicated to his work (Dunn, In press; Pietsch and Dunn, In press). He also possessed a strong, demanding personality. As Walter Kenrick Fisher (1940), a former student of Gilbert, wrote:

"Professor Gilbert was a scientist of very unusual talents, with a controlled and keen, logical mind. He exercised no patience with loose thinking or any work short of the best which a student could produce. His seminars afforded adequate outlet for his uncanny powers of searching analysis and relevant criticism. His students more than once have heard him relentlessly demolish a thesis of one of the Elect"

¹Jordan (1851–1931) was the preeminent ichthyologist of North America during the late 19th and early 20th centuries (Myers, 1951; Hubbs, 1964). President of Indiana University from 1885 to 1891 and founding President of Leland Stanford Junior University in 1891, his autobiography (Jordan, 1922) contains a wealth of information about ichthyology and fisheries biology as well as personalities of the era.

²Correspondence of Gilbert. National Archives (NA), Record Group (RG) 22, Entry (E) 63, Records of the *Albatross*,

An example of Gilbert's dedication to his profession, as well as his intense personality, is his scientific leadership of the 1902 cruise of the *Albatross*, in waters around Hawaii. During this expedition, Gilbert and the captain of the vessel, Lt. Commander Chauncey Thomas, Jr. (1850–1919), U.S.N. (Fig. 2), engaged in an acrimonious feud over what Gilbert perceived to be a lack of dedication by the captain.³

³Thomas was graduated third in his class from the U.S. Naval Academy in 1871. He commanded many naval vessels and served at various stations during his naval career, rising to Commanderin-Chief U.S. Pacific Fleet in 1911. He retired in 1912, holding the rank of Rear Admiral (Hamersly, 1902; Anonymous, 1943).

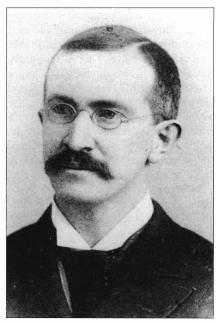


Figure 1.—Charles Henry Gilbert (ca. 1903), courtesy of Linda Long and the Stanford University Archives.

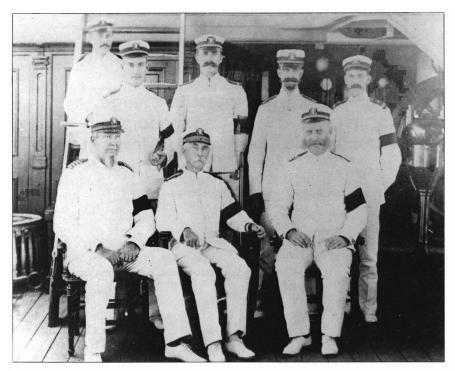


Figure 2.—LCDR Chauncey Thomas, Jr., front row, right, aboard the U.S.S. *Baltimore* in 1899 (NH 54428). Courtesy of the U.S. Naval Historical Center, Washington, D.C.

The two antagonists were each operating from different world viewpoints. Gilbert, the scientist, academician, and authority on fishes, was not accustomed to having his viewpoints challenged (Dunn, In press). Commander Thomas, a U.S. Naval Academy graduate and career officer, likewise was comfortable with authority, and did not suffer lightly questions of his command. This paper describes the 1902 Hawaiian expedition of the Albatross, which, despite the problems of the two antagonists, was a remarkably successful voyage, resulting in the discovery of many species new to science as well as many scientific publications of relevance even today.

Much of the U.S. Fish Commission's marine research at the turn of the century was exploratory in nature, with goals of determining what resources were located where. For example, from 1887 to 1902, the *Albatross* conducted surveys off South America, off the North American West Coast from Mexico to Canada and in Alaskan waters, in the South Seas, and off Japan, among other excursions (Hedgpeth, 1945). The expedition to the Hawaiian

Islands in 1902 (Anonymous, 1902a) was directed toward assessing fishery resources, and it followed an on-shore survey of fishes in 1901 conducted by Jordan and Barton Warren Evermann⁴ (Jordan and Evermann, 1902; 1903a, b) and sponsored by the Fish Commission (Smith, 1904).

According to the Fish Commission (Bowers, 1904), the purpose of the *Albatross* expedition to Hawaii in 1902 was as follows:

"In continuation of the investigation of the Hawaiian fisheries, begun in 1901 by direction of Congress, it was decided to send the *Albatross* to those islands to study the conditions in the surrounding waters. An arrangement was made with Dr. David Starr Jordan to have general supervision of the expedition, and Dr. Charles H. Gilbert was put in immedi-

ate charge of the scientific work. The investigation was to embrace dredging and collecting in channels and on the banks about the islands, and a thorough examination of the surroundings of Kauai, the oldest of the group, of outlying reefs about the islands northwest of Kauai, and of the different fishingbanks. It is believed information of both commercial and scientific importance will be gained"

The Hawaiian Islands had been annexed by the United States in 1898 and were made a colonial territory in 1900 (Abell et al., 1955). Hence the Government's interest in the fishery resources of this newly acquired region.

Primary source material for this narrative are Gilbert's letters to Jordan⁵ and to Thomas,⁶ as well as the progress reports submitted by Thomas to the Fish Commission.⁷ Dredging and other records of the *Albatross* for 1902 are listed in Report of the U.S. Commissoner of Fish and Fisheries (USFC, 1904).

The Albatross Expedition of 1902 to the Hawaiian Islands

The Steamer Albatross (Fig. 3), commissioned in 1882, was a iron-hulled, twin-screw vessel of 234 feet (70 m) in length, displacing 1,074 tons, with a total sail area of 7,521 square feet. She was reputedly the first vessel in the world built especially for marine fisheries and oceanographic research and was operated by the U.S. Navy for the Fish Commission, later (1903) named the Bureau of Fisheries (Hedgpeth, 1945; Mooney, 1991). The Albatross had a distinguished career serving national and international fisheries interests for nearly 40 years (Townsend, 1924; Hedgpeth, 1945; Peterson, 1988). Her service and contribution to Pacific fisheries was especially notable (Dunbar and Friday, 1994).

Gilbert was appointed "Naturalist-in-Charge" of the vessel, a temporary po-

⁴Evermann (1853–1932), also a student of Jordan, was Assistant-in-Charge, Division of Statistics and Methods of the Fisheries of the U.S. Fish Commission (USFC, 1905). He was with the Fish Commission from 1888–1914, and was later Director of the California Academy of Sciences, in San Francisco (Palmer, 1933; Hanna and Peers, 1944).

⁵Charles Henry Gilbert Papers (CHGP), Stanford University Archives (SUA), Stanford, CA, SC 58. ⁶Correspondence of Gilbert. NA, RG 22, E 63. See footnote 2.

⁷Reports for the Steamer *Albatross* for 24 March–3 August 1902; NA, RG 22, Folder *Albatross*, Box 6, 150/1/19/4.

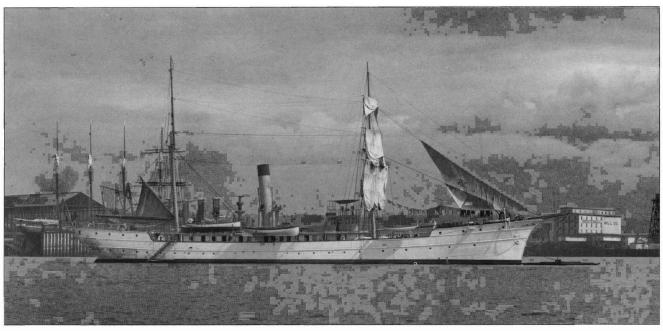


Figure 3.—U.S. Fish Commission Steamer Albatross (no. 2824-1). Courtesy of Puget Sound Maritime Historical Society and Museum of History and Industry, Seattle, Wash.

sition which he occupied while on leave from Stanford University. He was assisted by Charles Cleveland Nutting, of the University of Iowa, John Otterbein Snyder, 10 of Stanford University, and Walter Kenrick Fisher, 11 then a graduate student of Gilbert at Stanford. Pishery expert Alvin Burton Alexander and resident naturalist Frederic Morton Chamberlain were on

the permanent staff of the vessel (USFC, 1905). 13

Beam trawls and dredges were the vessel's principal sampling gears, but dip nets, gill nets, surface tow nets, and mid-water nets were also used. Shore and reef collecting was conducted at various points. Collections of both vertebrates and invertebrates were preserved for later study. Hydrographic and meteorological observations were recorded (USFC, 1904).

Captain Thomas had reservations about the extent of his authority even before the *Albatross* sailed from San Francisco. He wrote the Commissioner of Fisheries on 10 March 1902, prior to the ship's departure from San Francisco, as follows:

"An incident occurred recently which caused me to critically re-examine the Commission's instructions of October 29th, 1901, concerning the cruise in Hawaiian waters about to begin, and I wish to invite your attention to the wording of paragraph 3 of that commu-

nication, in which it is stated that Dr. Gilbert will have sole charge of the scientific work of the expedition, and the movements of the vessel will be subject to his direction [sic]."¹⁴

Thomas protested this provision, arguing that the captain "always held the final decision of all questions arising on a cruise," and he argued that the captain's authority must be restored. Thomas, with prescient foresight, argued:

"I have no desire to quibble or to cause any ill feeling and I shall at all times consult Dr. Gilbert as to his wishes and conform to them in all ways practicable, but there may easily arise differences of opinion as to the scope of the authority of the head of the scientific expedition and the commanding officer and in that case I have only the concluding portion of the same paragraph to support the authority of the Commission, and that really refers simply to the supply of boats and men." ¹⁴

⁸Aboard the *Albatross*, chief naturalists or "Naturalists-in-Charge," were temporary appointments created for visiting scientists and researchers. They were contrasted to "resident naturalist" which was a permanent Fish Commission position for the ship. This practice apparently dates from the first Commissioner of the U.S. Commission of Fish and Fisheries, Spencer Fullerton Baird (1823–1887), who frequently relied on academic scientists for research (Mark R. Jennings, Natl. Biol. Surv., Davis, Calif., personal commun., 2 June 1996). For more on the early history of the Fish Commission, see Cart, 1968; Allard, 1978; and Hobart, 1995.

⁹Nutting (1858–1927) was a Professor of Zoology at the State University of Iowa and was a specialist in invertebrate zoology (Cattell and Brimhall, 1921).

¹⁰Snyder (1867–1943) was a Professor of Zoology at Stanford University, whose specialty was fishes (Hubbs, 1943).

¹¹Fisher (1878–1953), a Professor of Zoology at Stanford University from 1905 to 1943, specialized in invertebrate zoology (Davis, 1958).

¹²Anonymous (1902a). This article succinctly described the expedition plans and participants.

¹³Alexander had served on the *Albatross* since 1888 (Hedgpeth, 1945). For more on Chamberlain (1867–1921), see Jennings (1987).

¹⁴Thomas to Commissioner of Fisheries, dated San Francisco 10 March 1902. NA, RG 22, E 63, See footnote 2.

Thomas closed his letter with a plea to modify the sailing orders "as to leave final decisions in the hands of the commanding officer after consultation with Dr. Gilbert." ¹⁴

Thomas's letter was answered by the Commissioner on 17 March 1902, although it was not received by the captain until he arrived in Honolulu. Commissioner George Montague Bowers¹⁵ wrote that "through inadvertence the direction of the movements of the 'Albatross' on the present cruise is virtually taken out of the hands of the commanding officer." Commissioner Bowers therefore changed the orders to read, in part:

".... You will so arrange the movements of the vessel as to accomplish to the best advantage the objects desired, and to this end it is expected that you will confer with Dr. Gilbert. But as commanding officer and the immediate representative of this Commission, and in view of your responsibility thereto and to the Navy Department, it is expected that your decision in an emergency will be final." ¹⁶

The *Albatross* departed San Francisco on 11 March 1902 for the Hawaiian Islands. The trip to Honolulu was not without difficulties and presented an ominous beginning of the expedition. Heavy weather was encountered on the first day's outing, and on 12 March the ship's quartermaster was thrown off the vessel and lost at sea.¹⁷

Attempts to trawl on Erben Bank enroute to Hawaii were made on 15 and 16 March, but they were a failure and, according to the captain, "the beam trawl, a boat trawl with tangles, the tangles and tangle bars, utilized at different time being all lost and the strains put on the dredging cable are said never to have been exceeded in the ship's history." 18

A total of 18 stations were sampled, using surface and intermediate-water nets, enroute to and in the vicinity of the Islands before the vessel arrived in Honolulu on 24 March (Table 1; Fig. 4, 5). The ship remained in port for coaling and maintenance until 27 March.¹⁸

Gilbert wrote Jordan a progress report on 23 March, while the vessel was within a day's sail of Honolulu. He described the dredging attempts made on the way to Hawaiian waters:

"At about 9 o'clock each morning, and at 8 o'clock at night, we have hauled one net at the surface, and have sent another one down to a depth of 50 to 150 fathoms. An astonishing amount and variety of life has been shown to exist. We have Protozoa, Coelenterates, Mollusks, Crustacea, Insects, and fishes—not to mention diatoms among the plants. The work has been done systematically, and the material carefully sorted and preserved. The field seems to be inexhaustible, as many new forms appear with each haul. The most remarkable animal came up from 100 fathoms. It is an elongate to worm-like creature, which we pronounced on casual inspection to be a Crustacean, and then later a worm. Its eyes are on flex-

17 (continued) a return to the spot with accuracy but the ship was put about and remained near the scene of the accident till after daylight with the hope of recovering the body but no signs of it were seen. A brother of the deceased is serving on board this ship and his wishes were taken regarding the effects of the drowned man. The requirements of the U.S. Navy Regulations in such cases have been carried out." Letter No. 83, Thomas to the Commissioner, dated Honolulu 24 March 1902, NA, RG 22, Reports for the Steamer Albatross for 24 March–3 August 1902; Folder Albatross, Box 6, 150/1/19/4.

ible stalks half an inch long. Fisher and Snyder began to draw and study it, and began to insist that it was a vertebrate. It is undoubtedly *a bony fish*, tho' possibly a larval form. The tail is heterocercal, the dorsal and anal developed, and the pectoralis peculiar broad flaps without very definite rays. If it is a larval form, I have no faintest idea what the adult will turn out to be." ^{19, 20}

Gilbert continued his letter, describing other interesting specimens they had collected, and he was, in particular, most fascinated with the larvae and young of fishes they were encountering. He wrote:

"If the young of local fishes can be taken almost anywhere in the open sea, it might be possible to map out zones of influence belonging to definite faunas, and to determine also the causes which limited their occurrence in certain waters." ²¹

Gilbert proposed to Jordan that upon completion of the Hawaiian Island expedition, such an attempt to inventory larval and juvenile fishes be conducted. He suggested that a line be run due east from Hawaii to the California coast to sample these forms systematically.²²

At this early stage in the expedition, Gilbert had nothing but praise for the conduct of the ship. He wrote Jordan:

"Our organization seems to be excellent. Captain Thomas is excellently disposed, with very genuine appreciation of the work we are trying to do."²²

During the first part of the cruise, the *Albatross* was trawling during the day and anchoring at night. This schedule was due, in part, to the shortage of a crew member because of the loss of the

¹⁵Bowers was Commissioner of Fisheries from 1898 to 1913 (Cart, 1968).

¹⁶Bowers to Thomas, dated Washington, D.C., 17 March 1902. NA, RG 22, E 63, No. 6447. See footnote 2.

¹⁷Thomas reported to the Commissioner: "The Albatross sailed from San Francisco, as reported by telegraph, at 2:05 p.m. of the 11th instant. Outside the heads she encountered heavy weather with a long swell from NW, wind fresh from the same direction. It was necessary to run the ship off four point from her course in order to avoid damage to the upper works from seas coming on board. At 2 a.m., of the 12th, in latitude 36 25' N., longitude 123 44' W., while taking the reading of the patent log and on duty as quartermaster of the watch, Bert Arnkil, Quartermaster, 3rd class, U.S. Navy, fell overboard or was flung over the rail by a violent lurch of the ship in the rough sea prevailing. Every effort was made to recover the unfortunate man but without avail. The lack of self lighting life buoys would have prevented

¹⁸Thomas to the Commissioner, letter No. 83, dated Honolulu 24 March 1902, NA, RG 22, Reports for the Steamer *Albatross* for 24 March—3 August 1902; Folder *Albatross*, Box 6, 150/1/19/4

¹⁹Gilbert to Jordan, dated *Albatross* 23 March 1902. CHGP, SUA, SC 58.

²⁰The larval fish with the elongate, stalked eyes, may have been a species of *Idiacanthus* (see Kawaguchi and Moser, 1984).

²¹Gilbert to Jordan dated, *Albatross* 23 March 1902. CHGP, SUA, SC 58.

²²Gilbert to Jordan, dated *Albatross* 23 March 1902. CHGP, SUA, SC 58. The proposed larval fish survey was not conducted.

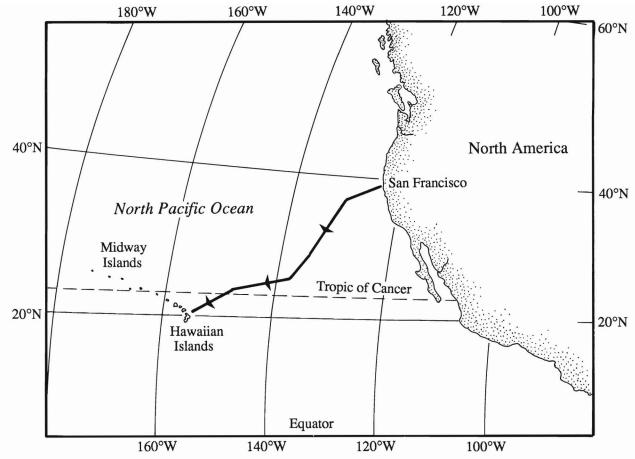


Figure 4.—Approximate route of the Albatross to the Hawaiian Islands, March 1902.

Table 1.—Route of the Steamer Albatross and number of stations sampled in the Hawaiian Archipelago, March-August 1902 (USFC, 1904).

Date	Route	No. of stations occupied	Date	Route	No. of stations occupied
11–16 Mar.	San Francisco to Kauai Channel, Hawaiian Islands	5 ¹	23 July	North coast of Maui Island	2 ²
17-23 Mar.	Kaiwi Channel, Hawaiian Islands	13 ²	23 July	Between Maui and Molokai Islands	5
27-31 Mar.	South coast of Oahu .	10 ³	24 July	Between Molokai and Oahu Islands	9
31 Mar9 Apr.	South coast of Molokai.	374	25 July	Northwest coast of Oahu Island	88
9-11 Apr.	Between Molokai and Maui Islands	14 ⁵	26 July	Southwest coast of Oahu Island	38
11-14 Apr.	Between Maui and Lanai Islands	86	31 July	Between Oahu and Kauai Islands	27
14-15 Apr.	South of Lanai Island.	37	31 Jul2 Aug.	Vicinity of Kauai Island	18 ¹⁶
16-17 Apr.	Between Maui and Molokai Islands	6	4 Aug.	Between Kauai Island and Bird Island	1
17-18 Apr.	North coast of Molokai	6 ²	5-8 Aug.	Vicinity of Bird Island	28 ¹⁷
19 Apr.	Between Molokai and Oahu Islands	2 ⁸	11-12 Aug.	Vicinity of Nihau Island	718
28 Apr.	South of Molokai Island	17	13 Aug.	Vicinity of Kauai Island	72
29 Apr.	Between Maui and Lanai Islands	1	23-27 Aug.	Between Honolulu and San Francisco	3
29 Apr.	Between Maui and Molokai Islands	5			•
30 Apr1 May	North coast of Molokai Island	5 ⁹	¹ Lost two dredges and one tangle net.		
5-7 May	South coast of Oahu Island	19 ¹⁰	² Net damaged during one haul.		
10-15 May	Honolulu to Laysan Island	6	³ Net damaged	on one haul; complete Tanner net lost on another ha	ul.
16-23 May	Vicinity Laysan Island	36 ¹¹	4 Net damaged on five hauls; complete Tanner net lost on one haul.		
29 May	French Frigate Shoal	712	5 Damage to ge	ar on three occasions; dredge lost on one haul.	
31 May	Necker Island Shoal to Bird Island	2	6 Lost tangle ge	ar at one station.	
2-3 June	Vicinity of Bird Island	3	7 Lost Blake frame and net at one station.		
9 June	Between Honolulu and Kauai Islands	1	⁸ Gear damage at two stations.		
10-17 June	Vicinity of Kauai Island	25 ¹³	9 Lost complete Tanner net at one station.		
17 June	Between Honolulu and Kauai Islands	313	¹⁰ Lost complete trawl on three occasions; extensive net damage on another haul.		
17-18 June	Between Kauai and Oahu Islands	3	¹¹ Lost complete trawl on four occasions; net damage at six stations.		
20-24 June	Vicinity of Kauai Island	19 ¹⁴	¹² Damage to gear on three stations.		
9 July	South coast of Oahu Island	5	¹³ Extensive damage to gear at ten stations; trawl lost at one station.		
10-14 July	West coast of Hawaii Island	17 ¹⁵	¹⁴ Gear damage at six stations; gear lost on one haul.		
16-18 July	Northeast coast of Hawaii Island	12 ⁸	15 Trawl damage at three stations; trawl lost at two stations.		
18 July	Between Hawaii and Maui Islands	22	16 Net damage at six stations; gear lost on two stations.		
19–21 July	North coast of Maui Island	208		at seven stations; trawl lost at one station.	
21–22 July	Between Maui and Molokai Islands	118		t one station; gear lost at another.	

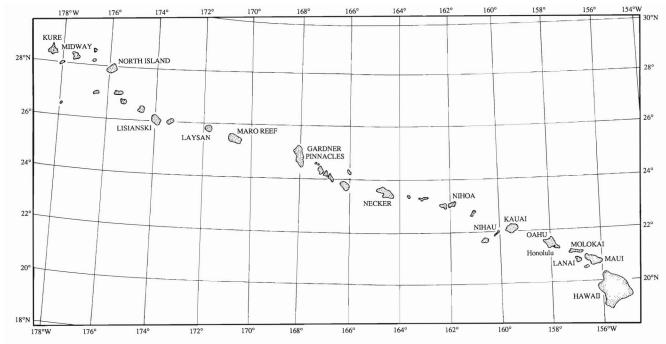


Figure 5.—Hawaiian Archipelago.

ship's quartermaster.²³ According to the captain's orders of 27 March: "When the ship is within reasonable distance of suitable ports she will be anchored therein and liberty granted the crew on Saturday afternoons and Sundays as required by U.S. Navy Regulations..."²⁴

From 27 March to 19 April, the *Albatross* dredged off the coasts of Oahu, Molokai, Maui, and Lanai islands (Table 1). Loss or damage to sampling gear was a significant problem during this period. Damage to nets was recorded on 14 hauls, and the gear was lost on five occasions (Table 1). Such extensive loss or damage to sampling gear caused considerable apprehension to the captain. Materials for repairing nets were ordered from San Francisco and a report was written to the Com-

²³Thomas to the Commissioner, letter no. 83,

dated Honolulu 24 March 1902, NA, RG 22,

missioner about the extensive gear loss.²⁵

The ship returned to Honolulu on 19 April for repairs and maintenance. By this time, Gilbert was becoming dissatisfied with the pace of work. He wrote Jordan on 27 April 1902:

"We have been resting on our oars for the last week, "making necessary repairs to the boilers and engines." I have been deeply disappointed with the amount of work we are able to get out of the ship. Sixteen days is the record during April, not excessive activity, surely. I have gently prodded and plead, but to no effect, except to exasperate. Unless your worthy Captain can divorce himself further from mail stations, and can strike a better pace, we shall fall far short of the completion of our task."²⁶

Gilbert described to Jordan the problems they were having with lost and damaged gear. Despite these conditions, the hauls were most interesting and rewarding scientifically. Jordan responded to Gilbert by letter in late May. He wrote:

"I am very sorry indeed to hear that matters are not satisfactory. Your captain has the opportunity of his life, but he does not seem to realize the existence of the great world outside naval affairs. I will write the Commissioner in regard to the matter and see what can be done." 27

In late April and early May, the vessel dredged off the north coast of Molokai Island (Table 1). The ship then returned to the vicinity of Oahu Island for further work, before returning to Honolulu. Again, gear loss and damage continued. As Thomas recorded:

"During the dredging operations of these three days [5–7 May], two 11 foot

Reports for the Steamer *Albatross* for 24 March-3 August 1902; Folder *Albatross*, Box 6, 150/1/
19/4.

25 Thomas to the Commissioner, letter no. 98, dated Honolulu 19 April 1902, NA, RG 22, Reports for the Steamer *Albatross* for 24 March-3 August 1902; Folder *Albatross*, Box 6, 150/1/19/4.

26 Gilbert to Jordan, dated Honolulu 27 April 1902; Folder *Albatross*, Box 6, 150/1/19/4.

 ²⁷ Jordan to Gilbert, dated Stanford 24 May 1902.
 CHGP, SUA, SC 58.

Tanner and an 8 foot Blake trawl frames, one dredging sinker, 80 fathoms of cable, and a complete tangle with 8 swabs, as well as tail weights, floats, etc., have been lost by encountering coral or lava rock bottom. The catch, however, exceeded expectations and Dr. Gilbert described Tuesday's work as the most satisfactory of the cruise."28

The Albatross on 10 May then proceeded west to Laysan Island and vicinity. This leg of the cruise lasted until 5 June (Table 1). In addition to dredging, shere excursions for scientific sampling were made on Laysan, Necker, and Bird islands.29

After a hiatus in Honolulu from 5 to 9 June, the ship proceeded to the vicinity of Kauai Island for further sampling (Table 1). Again, damage to gear was extensive. The Albatross returned to Honolulu on 18 June and Gilbert and Thomas met with Jordan for a review of the progress of the expedition.³⁰ Jordan had arrived from Stanford and was enroute to Pago Pago, Samoa.31 An additional period of sampling near Kauai Island followed from 20 to 24 June, before the ship returned to Honolulu for maintenance and repairs.

By then, the relationship between Thomas and Gilbert had steadily deteriorated. On 25 June, Gilbert wrote Jor-

²⁸Thomas to the Commissioner, letter no. 105,

dated Honolulu 8 May 1902, NA, RG 22, Reports for the Steamer Albatross for 24 March-3 August

²⁹Thomas to the Commissioner, letter no. 109, dated Honolulu 5 June 1902, NA, RG 22, Re-

ports for the Steamer Albatross for 24 March-3

August 1902; Folder Albatross, Box 6, 150/1/19/4.

30 Jordan to Hugh M. Smith, dated Stanford 5 June

1902. NA, RG 22, Reports for the Steamer Albatross for 24 March-3 August 1902; Folder Albatross, Box 6, 150/1/19/4. Jordan wrote to

Smith, who was Acting Commissioner of Fish and Fisheries, that "The work about the Hawai-

ian Islands has gone on more slowly than I an-

ticipated...." Jordan requested that the vessel re-

turn by the way of the Revillagigedo Islands and

³¹Jordan sailed to Hawaii from San Francisco in

June 1902 on a combination business and plea-

sure trip. His wife was in ill health and was in

Honolulu recuperating. Jordan came to visit her,

arriving in Honolulu on 18 June, and then con-

tinued to Samoa to collect fishes. This latter ex-

pedition was also supported by the Fish Commission (Anonymous, 1902b). Jordan met with

both Gilbert and Thomas while in Honolulu. Jor-

dan to Gilbert, dated 12 May, 24 May, and 11

June 1902. CHGP, SUA, SC 58.

described the reasons for this proposed work.

1902; Folder Albatross, Box 6, 150/1/19/4.

dan listing unfinished work. Included was work planned, but not yet completed, near all the major islands of the Hawaiian Archipelago, as well as Bird Island. Gilbert gave a copy of the letter to Thomas.32

Thomas replied to Gilbert by memorandum on 30 June. In it, he reviewed his discussions with Jordan. Thomas concluded his message to Gilbert by writing:

expressed desires that will delay the completion of the same at that time."33

Thomas then wrote the Commissioner on 30 June concerning Gilbert's list of unfinished work. He explained:

"Comparing my understanding of Dr. Jordan's ideas with those advanced by Dr. Gilbert, the large additional work desired by the latter will be at once apparent. I was under the impression that the trying work incident to the cruise in these tropical waters could be completed by hard work at the time of the return of Dr. Jordan on August 18th, but if the ideas advanced in this later communication are to prevail, no limit can be set to detention that will result . . . "34

Thomas concluded this message with a plea that the Commission set a termination date for the expedition. Further, that no additions to the schedule be allowed.

In a long, plaintive, and angry letter to Irving Hall Dunlap, chief clerk of the

"A copy of my communication (letter #117) to the Commission embodying my understanding of the wishes of Dr. Jordan is transmitted herewith for your information. I desire to complete the work in hand by the arrival of Dr. Jordan returning from Samoa and do not wish to undertake any additions to his

³²Gilbert to Jordan, dated Honolulu 25 June 1902. NA, RG 22, Reports for the Steamer Albatross for 24 March-3 August 1902; Folder Albatross, Box 6, 150/1/19/4.

Commissioner's Office, dated 2 July, Thomas wrote:

"I am between the devil and the deep blue sea, i.e., Dr. Gilbert and Dr. Jordan. The latter formulated certain work while here, a full report of which was embodied in an official report to the Commission recently. Now comes Dr. Gilbert and largely increases Dr. Jordan's requirements in a communication to that gentleman, a copy of which has been furnished me. By working nights and Sundays I can just about complete Dr. Jordan's desires by the date of his return, August 18th, but to accomplish Dr. Gilbert's additions will consume, the good Lord knows how much longer. I am sending a copy of the latter communication for the information of the Commission and a comparison will show the additions.

"Dr. Jordan told me that if on his return Dr. Gilbert was satisfied, he would also be satisfied. Now I defy the Angel Gabriel to satisfy Dr. Gilbert in the matter of dredging and I see no prospect of the ship's being relieved from service in this tropical clime till snow blows over the Washington Monument. I want to do my whole duty and I want to do it cheerfully but I feel that we are being imposed upon by these Stanford people who do not care for anything connected with the Fish Commission but are all for their institution and really we have worked harder than the records show of similar work for any period of her service.

"I am bound hand and foot to Dr. Jordan's desires, expressed by Dr. Gilbert's wishes. I can get along with the former but the latter needs a strong hand to manage him. So I am going to appeal once more for some show of relief from this climate before the same kills us all off. I have sent the Commission officially a full statement of this matter and I should be glad of a favorable decision. Burrage³⁵ has had a long talk with him on the subject of future work in the light of his memorandum for Dr. Jordan and my letter #117, a

³³Thomas to Gilbert, dated Honolulu 30 June 1902. NA, RG 22, Reports for the Steamer Albatross for 24 March-3 August 1902; Folder Albatross, Box 6, 150/1/19/4.

³⁴Thomas to the Commissioner, dated Honolulu 30 June 1902. NA, RG 22, Reports for the Steamer Albatross for 24 March-3 August 1902; Folder Albatross, Box 6, 150/1/19/4.

³⁵Guy Hamilton Burrage was the ship's engineering officer on this cruise. He subsequently served as captain of the Albatross from 1910-1912 (Hedgpeth, 1945).

copy of which I have given him. He became so offensive in his remarks that Burrage had to tell him that he was forgetting himself. He will not tolerate any superior authority to himself and his desires and even the plainly expressed desires of Dr. Jordan have no effect on him in the way of subordination. He said that he doubted if he could complete the work assigned by Dr. Jordan prior to his return and then warned us that unless he, Gilbert, was satisfied Dr. Jordan would not be. Now the Angel Gabriel could not satisfy Dr. Gilbert. He is insatiable. Dr. Jordan pointed out the places in which he desired dredging to be done but that cuts no ice with Gilbert. He plainly asked if he could not dredge where he wanted and when told that Dr. Jordan's wishes would be solely followed, flew into a rage. I shall draw the line closely to what Dr. Jordan told me and I wish to have the Commission back me up in the matter and support me in resisting Dr. Gilbert's insubordination and defiance of all authority.

"My personal relations with him are those required by the situation. I have lost all respect for him but must treat him with courtesy as he is in my cabin and my mess. I stood his personal conferences until he became so insulting in his language that I was obliged to turn such matters over to Burrage with whom I can talk without becoming outraged. The first arrival here was a signal for an insult so pronounced that Burrage who was present told me later that he failed to see how I kept my temper and refrained from knocking him down." 36

The captain's letter continued with example after example of supposed problems caused by Gilbert. Thomas closed his letter by writing:

"Pardon my tale of woe. I assure you it is forced out of me for I fully intended to keep silence till the completion of the cruise, but I simply must exhaust all chances to rid myself of the presence of Dr. Gilbert in the close communion we now enjoy! [sic]."³⁶

Gilbert reported to Jordan in late July, discussed his problems with Thomas, and described the progress of the cruise. He wrote:

"Your letter³⁷ to Captain Thomas was well calculated to straighten matters out, even had it found him in the same mood as before. During our cruise to Hawaii, however, he received from some quarter a sudden illumination. We began to work days, nights, and Sundays, in wholly unprecedented fashion, with the sounding properly subordinated to dredging, the amount of work in any locality being left in my hands. They suddenly awakened to the fact that I would have a word to say concerning the date of departure for San Francisco. No other motive appeals to them, so I can congratulate you and all of us that you were able to apply it so effectively. The result has been that in 17 days were made nearly 100 dredge hauls, almost

one-third the entire number made during the Hawaiian cruise thus far; a comment on previous work! If we continue working at the same rate, we shall be awaiting you on the 18th [of August] with our task measurably done. We leave tonight for Kauai and Bird Island."³⁸

According to Gilbert, trawling was difficult around the island of Hawaii as the bottom was rough or barren. In most locations, the available dredging area was confined to within the 400 fathom line. He indicated that their work would be completed by 18 August. 38, 39

Thomas again wrote Dunlap from Honolulu in mid-August. This long letter was a combination of progress report and bitter complaint about Thomas' relationship with Gilbert. This letter also highlighted the perceived differences in view point of the two antagonists:

"Many thanks for your condolences and your action in the case of Gilbert vs. Thomas. Since Dr. Jordan was here Dr. Gilbert has completely changed his tactics and has been as affable, polite and considerate as any one could ask. Just what caused this complete reversal I am at a loss to understand, but it must have been something that Dr. Jordan said to him without my knowledge. But no man takes me in twice by similar actions and the decent treatment of the past month or so cannot wipe out the decidedly reverse previously I truly was never treated in a like manner in my life and I shall never permit anything of the kind to occur again even at the risk of doing myself injustice with the powers that be. Since I discovered that night work would help amazingly in the way of "satisfying" the two Doctors, night work has been the portion of the scientists congregated on board the Albatross and they did not appreciate it to its fullest extent. But it has entirely completed the work laid down by both scien-

³⁷Jordan to Thomas, dated Apia, Samoa, 18 July 1902. This letter was not received by Thomas until at least 25 July when the Albatross returned to Honolulu. In this letter, Jordan indicated to Thomas that he had received Gilbert's memorandum of 25 June 1902 listing "unfinished work." Jordan essentially supported Gilbert in all respects and reiterated that Gilbert was in charge of all decisions concerning when and where to sample. Thomas immediately replied to Jordan, writing that "As between objects laid down by you and by the Commission and objects pointed out by Dr. Gilbert, I have no hesitation in arriving at the conclusion to adhere to the former and disregard the latter." Thomas defended his work and claimed the best record of any during the Albatross fisheries history (Thomas to Jordan, dated Honolulu 29 July 1902). Thomas forwarded to the Commissioner a copy of both Jordan's letter and Thomas's reply, as well as further comment. Thomas argued that the work desired by Jordan would be entirely completed by the time of Jordan's arrival in Honolulu on 18 August and therefore the letter was of little consequence. Thomas, however, again protested the implication that he, Thomas, was under orders from either Jordan or Gilbert, writing "I am entirely willing to accept and have done so constantly on this cruise, suggestions but to have an officer of my age, rank and experience placed under the orders of an irresponsible college professor such as Dr. Gilbert, is repugnant to my views and I cannot bring myself to believe that the Commission has any sympathy with such a state of af-(Thomas to Commissioner, dated Honolulu 30 July 1902). All NA, RG 22, Reports for the Steamer Albatross for 24 March-3 August 1902; Folder Albatross, Box 6, 150/1/19/4.

³⁸Gilbert to Jordan, dated Honolulu 30 July 1902. CHGP, SUA, SC 58

³⁹According to Thomas, extensive night work satisfied Gilbert, and the desired work would be completed by 18 August. Thomas to the Commissioner, dated Honolulu 26 July 1902. NA, RG 22, Reports for the Steamer *Albatross* for 24 March–3 August 1902; Folder *Albatross*, Box 6, 150/1/19/4.

³⁶Thomas to the Commissioner, dated Honolulu 2 July 1902. NA, RG 22, Reports for the Steamer *Albatross* for 24 March–3 August 1902; Folder *Albatross*, Box 6, 150/1/19/4.

tific heads and we are now awaiting the arrival of the *Sonoma* with Dr. Jordan to consult with him and receive his final 'depart in peace, bless you my children.' "40

Thomas continued his letter to Dunlap by describing the difficulties a Naval officer underwent in serving civilians at sea. He wrote: "I am afraid you do not quite appreciate the feelings of a naval officer placed under the command of one office when he feels that he is being placed under several other peoples orders"

Thomas cited the relevant Naval regulations and drew examples of his recent experiences aboard the *Albatross*:

"You will observe that nothing is clearer than that but two persons may be look to for orders or be regarded as higher authority in the Commission's service and nothing is said regarding a shifting of such authority to others in any walk of life..... And here was the rock upon which Dr. Gilbert split. He could not be made to comprehend where his functions began and mine ceased or the contrary—he was 'the whole thing.'"⁴⁰

Captain Thomas indicated he would be leaving the ship and would not continue his assignment. He recommended, "You gentlemen should never permit him [Gilbert] to appear in a similar capacity on board the *Albatross*, whoever commands her, for while he is a fine scientist in his line and otherwise, he is not fit to deal with responsible questions or people." Thomas was proud of his accomplishments during the cruise, noting that they had

"... generally done an amount of work that I never would have believed could be accomplished at first. But in doing all this, some 1400 soundings, we have made 397 dredging stations, all but 43 being bottom work, the 43 surface net work; we have filled up every jar, bottle and crock that we brought along with specimens and bought a lot more, have used 10 bbls of alcohol and then began on formaline"40

⁴⁰Thomas to Dunlap, dated Honolulu 15 August 1902. NA, RG 22, E 63, Records of the *Albatross*.

The captain continued his summary by comparing the accomplishments of the *Albatross* with that of the *Challenger*. However, his anger and bitterness continued to surface:

"I resent the idea that seems to prevail on the Pacific coast that the *Albatross* is a mere annex to Stanford University. She belongs to the Fish Commission — an idea that I seek to keep to the fore at all times and in all future expeditions. I trust an assistant who will have the same broad notion will be sent to have entire charge of her scientific work."

According to Thomas's letter, Jordan was due in Honolulu on August 18. The *Albatross* was due to leave for San Francisco shortly thereafter.

After arriving in San Francisco (Anonymous, 1902b), however, the feud between Thomas and Gilbert continued unabated. Frederic Chamberlain, the Fish Commission biologist assigned to the ship, reported to Thomas that Gilbert had removed some fishes which were contained in the ship's permanent collection. According to Chamberlain, the fishes in this collection ". . . have been obtained from time to time since the Albatross has been in commission, being selected on account of their oddity, peculiar appearance, or some such point as will make them of most interest to visitors as illustrations of the scientific work of the vessel."41 In his report, Chamberlain added:

"During the interval between the departure of the 'Albatross' from San Francisco and her arrival in Honolulu, Dr. Gilbert and Mr. Snyder examined a number of these specimens. At my request Dr. Gilbert labeled those that he identified. In course of conversation he remarked that he was unable to identify a few of the specimens and that he believed them to be undescribed species. He further said that as such they should not remain on the vessel but that he would take them from the exhibit jars

and place them in the collection to be made on the cruise, with which they would be shipped to Stanford University, remarking at the same time that the empty jars could be filled up with 'common stuff.' At this time I again asked him to please make a note of whatever he took out. Somewhat later I again asked Dr. Gilbert to hand me a list of the specimens he had removed, and was met by the statement that 'as they were not on charge' it would be unnecessary to furnish a list. I do not know how many nor what specimens were removed but am informed by the sailors in charge of the laboratories that about eight jars were emptied."41

Thomas forwarded Chamberlain's report to the Commissioner on 12 September, requesting that he order Gilbert to return the specimens. In his letter, Thomas argued:

"The collection of specimens belonging to the ship is of the greatest interest to scientific people and others visiting on board and should be kept intact. That they are not 'on charge' cannot excuse any attempt to acquire them for Stanford University or for the private collection of any person under the temporary employ of the Commission and as such in full charge of the scientific department of the ship."

The issues raised in this letter subsequently reached Jordan. Although, Jordan's letter to Gilbert has not been found, Gilbert's response has. On 26 September 1902, he wrote Jordan explaining:

".... While engaged in labeling the exhibition series, I came across six or eight small fishes which I was unable to identify with the literature at hand. These were taken out of the exhibition jars and placed in the study series, where they now are. As soon as their scientific status is determined it is the intention to report the matter to the Commissioner, and ask instructions as

⁴¹Chamberlain to Thomas, dated San Francisco 1 September 1902. NA, RG 22, E 63, Records of the *Albatross*.

⁴²Thomas to the Commissioner, dated San Francisco 12 September 1902. NA, RG 22, E 63, Records of the *Albatross*.

to the final disposition to be made of the specimens."43

Gilbert further explained that the specimens were transferred on or about 15 March and that no criticism or comment was made until now, 6 months later. He concluded:

"The charge which he [Thomas] now makes, that I attempted to acquire these specimens for Stanford University or for a private collection, is a malicious falsehood and constitutes behaviour unbecoming an officer or a gentleman. It certainly appears that scientific men in the temporary employ of the Commission should be protected against gratuitous attacks of this nature."

At the same time that Thomas was concerned over the removal of fishes from the special exhibit aboard the *Albatross*, he and Gilbert were feuding by letter over the "ship's mess." According to Gilbert, he loaned \$25 to Thomas to help pay for the groceries purchased for the officer's mess. Gilbert argued in a letter to Thomas dated 8 September:

"You will recall that the twenty-five dollars of mine which you now hold was voluntarily advanced by me as a loan, in view of the fact that you were temporarily embarrassed financially, and were under the necessity of making purchases of fresh provisions for our mess. That such was your own understanding of the case is evidenced by the further fact that you, of your own motion, offered to return to me the money in Honolulu, on or about the next payday. Knowing from your conversation that you were still somewhat short of funds, I invited you to retain the sum until the end of the cruise. I was sufficiently astonished when at the end of the cruise you announced your intention to retain possession of that sum until you should run over your mess accounts. Whatever those accounts may show, you must agree, I think, that you can have no claim upon a sum of money

⁴³Gilbert to Jordan, dated Stanford University 26 September 1902. CHGP, SUA, SC 58.

which came into your possession under the circumstances and in the way you described. Will you not, therefore, return it to me at your earliest convenience."⁴⁴

Thomas's direct reply to Gilbert has not been found. Gilbert, however, replied to Thomas on 11 September:

"We are neither of us deceived by your letter of the 10th inst. You cannot explain your offer to return me the money in Honolulu on any such plea as that set up in your letter. But perhaps you will deny the fact. The question of excess board over that allowed by the Commission has nothing to do with this twenty-five dollars. I have certainly not asked you to pay for the pleasure of furnishing me with meals, nor had I any intention of doing so. One prefers however to have the satisfaction of paying his bills after they are presented, instead of having property that is undeniably his 'held up' by a prospective creditor. There is a humorous side of course to such an episode. I rather enjoy the recollection that I originally furnished this money out of excess of good nature and a desire to be accommodating. I trust you may also enjoy the thought. I can certainly afford the situation, if you can."45

Thomas replied to Gilbert on 12 September, continuing the debate. He argued:

"I acknowledge the receipt of your communication of the 11th instant and in reply beg leave to say that the explanation of my offer to return the \$25 in question shortly after our arrival at Honolulu was due to the fact that the indications at that time were that the amount allowed by the Commission would cover your mess bill but I ascertained later that it would not do so. As you declined receiving it I thought no more about it till I told you I would remit the amount due you after obtaining the settlement with the grocers, which is the

procedure that would be adopted by any mess in the naval service. I prefer to remit the full amount and bear any excess out of my own pocket to having anything further to do with you in any way and I enclose a check for the same, which I thank you to acknowledge. I shall forward copies of your letters to the Fish Commission for its information."⁴⁶

Thomas sent copies of this letter to the Fish Commission with a detailed defense of his handling of the "mess account" and his dealings with Gilbert. He concluded his defense by writing:

"It has remained for Dr. Gilbert alone of all the people with whom I have been associated to question my personal honesty and I resent such imputation but I have no recourse but to fully inform the Commission as to his action to the end that no future commanding officer of this ship should be subjected to such treatment from him, for I trust the Commission will see that he is not a fit person to be placed in contact with gentlemen under any circumstances."⁴⁷

Thomas continued his broadside against Gilbert, describing in detail what he considered Gilbert's interference with the internal operations of the vessel. He accused Gilbert of interviewing crew members of the vessel while in Honolulu in April to determine if engine repairs were indeed required, as Thomas had reported, and, if so, the length of time such repairs should require. ⁴⁸ Thomas wrote: "As I say, I can afford to treat with silent contempt his personal insults but on learning of this

⁴⁴Gilbert to Thomas, dated Stanford University 8 September 1902. NA, RG 22, E 63, Records of the Albatross.

⁴⁵Gilbert to Thomas, dated Stanford University 11 September 1902. NA, RG 22, E 63, Records of the *Albatross*.

⁴⁶Thomas to Gilbert, dated San Francisco 12 September 1902. NA, RG 22, E 63, Records of the *Albatross*.

⁴⁷Thomas to the Commissioner, dated San Francisco 14 September 1902. NA, RG 22, E 63, Records of the *Albatross*.

⁴⁸Hepburn to Thomas, dated Honolulu 19 April 1902. NA, RG 22, Reports for the Steamer *Albatross* for 24 March–3 August 1902; Folder *Albatross*, Box 6, 150/1/19/4. Lieutenant junior grade Arthur Japy Hepburn (1877–1964), U.S.N., was an officer aboard the *Albatross* in 1902 and also in 1906 (Dunn, 1996b). A graduate of the U.S. Naval Academy in 1897, Hepburn reached the rank of Admiral in 1936. Record of Officers, U. S. Navy, Arthur Hepburn, Military Service Records, M1328, Vol. 30, p. 89, NA; Anonymous, 1968).

transaction I was simply furious and it was only with the greatest effort that I succeeded in stifling my natural desires to free the ship from the insult of Dr. Gilbert's presence by remembering that he had been placed in his position by the Commission to effect certain work and I should not allow my personal feelings to interfere with the accomplishment of that duty."⁴⁹

Thomas closed this communication with comments about Gilbert's "attitude" after meeting in Honolulu with Jordan. Thomas wrote:

"It is only fair to Dr. Gilbert to state that after his consultation with Dr. Jordan, on June 18th, he changed his whole course of action and was, of course, met more than half way in efforts to preserve a peaceful relation with the officers of the ship. What Dr. Jordan said to him I do not know, but if he said anything it was based entirely on Dr. Gilbert's own reports for I never alluded in any way to any differences on board the ship in the expedition. It was my aim always to treat Dr. Gilbert and his party with all courtesy both official and private and it was only when his course forced me in order to retain my own self respect to deal with him through the executive officer or in writing, that any severance in outwardly friendly intercourse could have been detected."49

The debate over the "mess bill" continued in force. On 15 September, Gilbert acknowledged receipt of Thomas's letter of 12 September, as well as the check for \$25. Gilbert renewed his offer "to settle with you for any deficiency in the appropriations made by the Fish Commission to cover my mess account, if you will present a bill therefore in proper form." Gilbert defended his position, arguing:

"On previous cruises which I have made on the Albatross, I have been re-

⁴⁹Thomas to the Commissioner, dated San Fran-

cisco 14 September 1902. NA, RG 22, Records

ceived as a regular member of the mess to which I belonged, and have at the end of each month paid my pro rata amount of the expenses of that month, it being also understood that the accounts of the mess were open to inspection. On the cruise just finished, a different method was adopted, inasmuch as all the special officers of the Commission, in the Cabin and in the Wardroom, were charged the maximum sum allowed by the Commission for their maintenance, with out reference to the monthly expenses of the mess. This procedure was never officially brought to my attention, and so long as the messes in question were securing a slight but welcome surplus over the actual cost of the service rendered, it was a matter in which I had no concern. But when, in my case, a deficit is declared instead of a surplus. and I am asked to settle the balance, I am certainly within my rights when I demand that you should present me first a formal bill, with an opportunity to inspect the mess accounts should I desire to avail myself of that privilege. It is to be hoped that this 'is the course that would be adopted by any mess in the naval service."50

This letter prompted a further response by Thomas on 17 September: "I acknowledge the receipt of your communication of the 15th instant and as previously intimated do not desire any further correspondence with you in any way. Should you have anything to say concerning our recent official connection you may do it through the Commission of Fish and Fisheries." ⁵¹

Thomas forwarded the above two letters to the Commissioner, with a detailed defense of his method of handling the ship's mess accounts. Thomas' accounting found the wardroom mess to be about \$20 per person short of covering expenses. His parting shot at Gilbert was:

"Here was a cruise on which the scientists temporarily engaged went to do what pleases them most: to gain name and fame in the scientific world for discoveries in a virgin field. Why should the Commission bear their personal expenses in giving them a summer's outing to do what they most desire? The ship could have been loaded down with naturalists anxious to pay their own way and give their services gratuitously."52

The final scenario in this tale arose over an article published in the *San Francisco Examiner* on 12 October 1902 (Anonymous, 1902c; Lewis, 1902). The article, about Gilbert and the *Albatross* expedition to Hawaii, concentrated on the collection of unusual fishes during the cruise, including a description of a "curious eel, whose eyes have disappeared and have been substituted by two patches of phosphorescence."

The article caused an outburst from Thomas who, on 13 October, wrote the Commission, complaining:

"This article was evidently inspired by Dr. Gilbert and the dishonesty of his methods is well illustrated by the description of the 'Curious Eel....' This eel is one of the specimens which Dr. Gilbert removed from the exhibition jars belonging to the ship and had no earthly connection with the Hawaiian collection and it will be observed in the text describing the same in this article, that it is not expressly stated that it came from this cruise but the inference is undoubted. It should also be noted that where there has been a single specimen captured it will be reserved for future students of Stanford."53

Three days later, Thomas mailed a "Mea Culpa" to the Commissioner, writing as follows:

- "1. I beg leave to confirm my night message of this date, as follows: "Referring my letter number one sixty-six dated October 'thirteenth, request no action be taken until receipt letter written to-day."
- 2. At the time my letter #166 was written it was my belief that the 'curi-

of the Albatross.

⁵¹Thomas to Gilbert, dated San Francisco 17 September 1902. NA, RG 22, E 63, Records of the *Albatross*.

 ⁵²Thomas to the Commissioner, dated San Francisco 17 September 1902. NA, RG 22, E 63, Records of the Albatross.

⁵³Thomas to the Commissioner, dated San Francisco 13 October 1902. NA, RG 22, E 63, Records of the *Albatross*.

⁵⁰Gilbert to Thomas, dated Stanford University 15 September 1902. NA, RG 22, E 63, Records of the *Albatross*.

ous eel' under discussion had been removed, with other specimens, from the laboratory by Dr. Gilbert. To-day, in making his inventory, Mr. Chamberlain was astounded to discover the eel, in its usual museum jar, but in a different place. My remarks, relating to the eel only, as expressed in my letter #166 are retracted."54

Synopsis

The two antagonists finally parted ways. Thomas requested a transfer from the *Albatross*⁵⁵ and was appointed captain of the U.S.N. *Bennington* in late 1902. He continued his Naval career, rising to Rear Admiral, which culminated in his appointment as Commander-in-Chief, U.S. Pacific Fleet in 1911. Thomas retired from active duty in 1912, having served the Navy for over 40 years. He died in 1919 (Anonymous, 1943).

Gilbert continued his research at Stanford University, including additional stints on the *Albatross* in 1903, 1904, and 1906 (Hedgpeth, 1945). He served as Naturalist-in-Charge of the *Albatross* in 1906 during a cruise in the Bering Sea and in waters off Kamchatka and Japan (Dunn, 1996b), and records

from this cruise provided no evidence of any conflict between Gilbert and the captain of the vessel, LeRoy Mason Garrett.

By 1910 Gilbert had turned his attention to the study of Pacific salmon, Oncorhynchus spp., and had become the leading authority in North America on these economically important fishes (Dunn, 1996a). Gilbert retired from Stanford University in 1925, continued his salmon research in 1926 and 1927, and died in 1928 (Dunn, In press). In memory of Gilbert, a new Bureau of Commercial Fisheries research vessel, stationed in Honolulu, Hawaii, was named the Charles Henry Gilbert (Strasburg and Yuen, 1960; Dunn, In press). Additionally, a new biology building at Stanford University was recently christened the "Charles H. Gilbert Biological Sciences Building" (Anonymous, 1991).

Despite the personal antagonism and conflict between these two strong personalities, the voyage of the *Albatross* to Hawaii in 1902 must be considered highly successful, based on the collections made, scientific papers published, and the discovery and description of specimens new to science. The fishes collected were taken to Stanford University for study, whereas the invertebrate taxa, and vertebrates other than fishes, were shipped to the Smithsonian Institution. In December of 1902, Gilbert sent five boxes of invertebrates to

the National Museum of Natural History for scientific study. This was followed in January 1903 by another shipment of two boxes of crustaceans and one box of corals.⁵⁶

About 27 scientific papers were published based on collections or observations made on this expedition, resulting in significant contributions to knowledge (Table 2). The papers by Gilbert (1905) and Snyder (1904) described a total of 17 new genera and 119 new species of fishes. Gilbert's contribution, on the deep-sea fishes collected, described a remarkable 15 new genera and 94 new species of fishes in a single paper. Nineteen publications concern-

⁵⁶In a letter to the Director, U.S. National Museum, Gilbert wrote: "... I am forwarding to the Museum such of the collections of the Albatross Hawaiian Expedition of 1902, as will be reported upon by members of the Museum staff." Listed were two boxes of Crustacea, two boxes of corals, and one box of Mollusca. Gilbert to the Director, U.S. National Museum, dated Stanford 16 December 1902. Smithsonian Institution Archives (SIA), Record Unit (RU) 213, Division of Fishes (DF), 1865-1941, Records, Box 7, Folder 9, and SIA, RU 305, Registrar, 1834–1958, Accession Records, File No. 40409. In January 1903, Gilbert sent the Museum a box of corals and two more boxes of Crustacea. He asked that the Crustacea be directed to Miss Mary J. Rathbun and the corals to Dr. J. Wayland Vaughn of the Museum (SIA, RU 305, File 40520). In April 1903, Gilbert sent a porpoise (Pseudorca crassideus) skeleton to the museum. See also True (1903) for information on other mammal specimens collected during the Albatross expedition to Hawaii.

⁵⁴Thomas to the Commissioner, dated San Francisco 16 October 1902. NA, RG 22, E 63, Records of the *Albatross*.

Table 2.—Selected publications resulting from the 1902 expedition of the U.S. Fish Commission Steamer Albatross in Hawaiian waters.

Author	Subject	Comments		
On fishes				
Gilbert (1905)	Deep sea fishes of the Hawaiian Islands	15 new genera and 94 new species		
Snyder (1904)	Shorefishes of the Hawaiian Islands	Two new genera and 25 new species		
Other than fishes				
Berry (1909; 1913; 1914)	Cephalopods of the Hawaiian Islands	One new genus and 33 new species		
Clark (1912)	Echinoderms of the Hawaiian Islands	Distribution and diagnosis		
Clark and Agassiz (1907a, b; 1908; 1909)	Echinoderms of the Hawaiian Islands	Four new genera and 12 new species		
Coe (1906)	Nemertean worms collected by the Albatross	Two new species		
Fisher (1903a)	Birds of the Hawaiian Islands	Distribution and checklist		
Fisher (1903b)	Birds of Laysan Island	Behavior		
Fisher (1903c)	A new sea-bird from the Leward Islands	One new species		
Fisher (1904)	Laysan albatross	Behavior		
Fisher (1906)	Review of starfishes of the Hawaiian Islands	One new family, eight new genera, and 52 new species		
Fisher (1907)	Review of sea cucumbers of the Hawaiian Islands	One new genus and 19 new species		
Fisher (1911)	A new starfish from Hawaiian waters	One new genus and one new species		
Mayer (1906)	Medusae collected from Hawaiian waters	Two new species		
Nutting (1905)	Hydroids and schizopods of the Hawaiian Islands	Two new families, two new genera, and 29 new species		
Ortmann (1905)	Crustacean larvae of the Hawaiian Islands	Distribution and diagnosis		
Pilsbry (1907)	Barnacles of Hawaii	Eight new species		
Rathbun (1906)	Brachyuran and macuran crabs of the Hawaiian Islands	Two new genera, 80 new species, and three new sub-specie		
Richardson (1903; 1910)	Descriptions of isopods collected	Three new genera and three new species		
Treadwell (1906)	Polychaet annelids of the Hawaiian Islands	Twenty-seven new species		
True (1903)	Notes on porpoises			

⁵⁵Thomas to Dunlap, dated Honolulu 15 August 1902. NA, RG 22, E 63, Records of the *Albatross*.

ing various invertebrate groups resulted in the description of three new families, 22 new genera, and 259 new species. Additionally, a definitive review of the shorefishes of the Hawaiian Archipelago was later published by Jordan and Evermann (1905), as part of the overall investigation of the fishes of the Hawaiian Archipelago.

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