begins by describing the inhumanity of the proto-Germanic Suebi peoples from before Caesar's time and progresses to the present. We quote here the complete last paragraph of the article:

"Thus we find, in the primitive Teuton, the attributes which have united a horrified and exasperated world against him in this present struggle. If the descendant has altered in any essential particular from the "Blond Beast¹³⁷, who went about in skins, the difference is not distinguishable. And this is the people against whom we are making war. It is pleasant, and possibly commendable, to indulge in the platitude that we war only upon the military autocracy, the Kaiser, his Tirpitzes, his Bissings, his Hindenburgs¹³⁸, and other unspeakables, and that we love the German people. We might be privileged to enjoy at least this

¹³⁸Alfred von Tirpitz (1849–1930), German Grand Admiral responsible for policy of unrestricted submarine warfare. Moritz Ferdinand Freiherr von Bissing (1844-1917), Prussian General, governor of occupied Belgium, long believed to have been responsible for deporting Belgians to Germany to be used as forced labor, but he may not have been responsible for this policy. Paul von Hindenburg (1847-1934), often successful military strategist, but ultimately battle losing supreme commander of the German armies during World War I. In 1925, Hindenburg was elected second President of the Weimar Republic, and was reelected in 1932 (defeating Adolf Hitler, whom he unfortunately named chancellor of Germany) and served until his death in 1934 (various sources).

smug satisfaction had we a shred of evidence that a single atrocity in this war has failed to receive the full endorsement of that people as a whole."

A week later, the *New York Times* (24 Mar. 1918, p. X5) published a lengthy letter to the editor by J. J. Crawford, supporting and elaborating on CBH's thesis. One of us (VGS) clearly remembers frequently hearing similar expressions concerning the genetic character of Germans during and after World War II. CBH was only partly correct in his indictments of the particular Germans he mentions, but this subject is not relevant to our report. We mention it only for its interest with regard to CBH.

The March 1918 article is the last publication that CBH authored, and his 1915 article, "Monterey on the Etching Plate," is the last article, his own or those of others, for which he specifically prepared the illustrations. Henceforth, CBH would devote his creative efforts to preparing the backgrounds for the dioramas at the California Academy of Sciences and his landscapes and seascapes.

CBH's Fish Specimens

On those trips that CBH made alone in order to illustrate fishes for the USFC and USBF, he was requested to retain and tag specimens he collected and illustrated. The specimens he collected and retained were deposited in the collection of the USFC. For the most part, we do not know what happened to the specimens, although a few were transferred to USNM. The USNM collections have 13 specimens that are indicated as having been collected by CBH. We have been unable to determine with certainty if any of these were used during the preparation of his illustrations, but he did not prepare an illustration of at least one of the specimens, USNM 125386, Antennairus ocellatus, an anglerfish, which indicates that he did not always illustrate every specimen or species he collected. Only general localities are associated with the USNM specimens: two (the anglerfish and Caraxnx hippos, USNM 169929), are indicated as Atlantic, and 11 (one as Salvelinus alpinus, USNM

61732, and ten as *Salmo salar sebago*, USNM 61750, 61753, 61755, 61758, 61779–61783) have the locality given as "North America."

A Final Small Sample of CBH's Paintings

Before proceeding to a listing and discussion of CBH's ichthyological illustrations, we present a small group of his seascape and landscape paintings (Fig. 52) in addition to the few presented earlier (Fig. 12, 13, 18, 19, 51).

CBH's Ichthyological Illustrations

Aside from his illustrations of fishes for popular magazine articles, it appears that CBH completed a total of 158 scientific illustrations of fishes. Of these, 78 are in black and white or gray-scale and 80 are in color. The original artwork of 151 of the illustrations is present in the USNM illustration files, and four, representing salmonid species, are present at the California Department of Fish and Game, Sacramento (CDFG, henceforth).

All of the original 151 CBH illustrations and one of those missing (P04073) bear USNM illustration file catalog numbers, beginning with the letter P. We have assigned the other two missing originals that are not represented by files, arbitrary catalog numbers, beginning with the letters XX. File P04073, contains only proof copies of the published version of the original.

Three of the CDFG illustrations, including two of the rainbow trout and one of the brook trout, were commissioned by Charles A. Vogelsang (executive officer of the CDFG. from 1901 to 1910). CBH signed and dated these illustrations 1910. The fourth illustration, Chinook salmon, is unsigned and undated. We do not treat the four CDFG illustrations separately below, but each is mentioned in our discussions of similar CBH paintings of the same salmonid species represented in the USNM collection of illustrations.

Most recently, Wales (1957) published color reproductions of the three 1910 dated CDFG illustrations, with credit to CBH. He also included a colored illustration of *Oncorhynchus*

¹³⁷Following is from: www.thirdworldtraveler. com/Genocide/SplendidBlondeBeast.html, indicated as excerpted from a book by Chris-topher Simpson, "The Splendid Blond Beast: Money, Law and Genocide in the Twentieth Century" (ISBN: 1567510620), Common Courage Press, 1995, 399 p. [original not examined]: "Friedrich Nietzsche called the aristocratic predators who write society's laws 'the splendid blond beast' precisely because they so often behave as though they are beyond the reach of elementary morality. As he saw things, these elites have cut a path toward a certain sort of excellence consisting mainly of the exercise of power at the expense of others. When dealing with ordinary people, he said, they 'revert to the innocence of wild animals.... We can imagine them returning from an orgy of murder, arson, rape and torture, jubilant and at peace with themselves as though they had committed a fraternity prank-convinced, moreover, that the poets for a long time to come will have something to sing about and to praise.' Their brutality was true courage, Nietzsche thought, and the foundation of social order."



Figure 52.—CBH paintings (A, B, E, F) and studies (C, D), all signed (study signatures include a circled s), none dated. A, late afternoon, Pacific, dimensions not provided; B, Laguna sunset, 20.2×30 in (51.4×76.2 cm); C, waves, sunset, dimensions not provided; D, sunset sky, 10×14 in (25.4×35.6 cm); E, San Jacinto, verbena, 20×30 in (50.8×76.2 cm); F, canyon of the San Joaquin, southern Sierras, sunrise, dimensions not provided. B, from Bonhams & Butterfields, San Francisco, 8 June 2004 auction; others collection and courtesy of the late Claire Hudson Brett; A, C, D, E © Jim Patton, 1986.

mykiss aguabonita (as *O. aguabonita*), which was neither dated nor credited to anyone, but is clearly based on a modification of CBH's 1904 painting of that subspecies (our Plate 15 F), to which dark spots were added on the body and some other minor modifications made to the color pattern.

The originals of the three missing USNM illustrations and their dispositions are unknown; however, they should have been present in the USNM files. We presume this because the three missing originals were published in two articles in two different Bulletins of the United States Bureau of Fisheries, in both of which the originals of all the other included CBH illustrations are in the USNM files.

In Plates 1–26, we present 151 figures copied (scanned) from the original illustrations and three copied from their first published versions. We do not include figures of the four CDFG illustrations, for which we had only poor copies.

Forty-one (26%) of CBH's illustrations of fishes were not published during his lifetime, and some of these were first published over 100 years after their preparation. Ono et al. (1983) first published two of the 41 illustrations 79 years after their preparation. Bond (1985) first published one 73 years after its preparation, and Murdy et al. (1997) first published 14, twelve prepared in 1896 and two prepared in early 1897. We publish 24 others, prepared between 1896 and 1903, for the first time, as much as 113 years after their preparation.

There are probably several reasons why many of the illustrations remained unpublished for so long. Some, based on the presence of frame marks (more below), were probably meant only for inclusion in USFC exhibitions (e.g. the Paris Exposition Universelle (World's Fair), some were initially planned for publications that did not materialize (see remarks concerning E. T. Seton below), and some appear to have been superfluous (e.g. P01788).

At least 18 of the illustrations, all in color, published after CBH's death, have a rectangular stain around their bordering surfaces. The stain appears to indicate that these illustrations had been framed for some period of time and that either the matting was acidic or, if there were no mats, the frames have stained the illustrations.¹³⁹ Of the 18 illustrations 13 were done in 1896 at Woods Hole, Mass., and five were done in 1897, at Key West, Fla. They were exhibited at the 1900 Paris World's Fair, from which CBH received a bronze medal for his work.¹⁴⁰ After the fair, the framed illustrations may have graced the offices of the USFC for a while before being unframed and filed. These "previously framed" illustrations are each so indicated in the accounts.

The illustration file also contains one unfinished (and unpublished) CBH color illustration, P09683, *Mycteroperca phenax* (Jordan and Swain), begun in Key West, Fla., in 1896, which we have not included among our plates. It lacks only the color pattern on the lower third of the body. We have no information on why it was not completed.

One or both sides of many illustrations contain labels and information about the illustration, often written by CBH. On the reverse side of many of the colored illustrations, CBH often pasted a palette of the watercolors he used in preparing the illustrations (e.g. Plate 13).

The original white surface of the watercolor boards on which many of the illustrations were painted has become tan to brownish through time, indicating that either the boards are acidic or that covering sheets of acidic paper affected the surfaces. The discoloration seriously affects the appearance of the paintings. For our publication, the discoloration was digitally eliminated by using the curves tool (control M) in Adobe Photoshop¹⁴¹, with little, if any, modification of the images. The images on color Plates 25 and 26 were painted in oil against rectangular, variably dark areas of oil paint. In the published versions of these figures, the printer removed most of the dark areas and decreased the intensity of the portion that was retained. Although this produces a more attractive illustration, we elected to reproduce the original illustrations as closely as possible.

We have seen only one other technically complete CBH painting of a fish. It is a framed oil painting of the rainbow trout, Oncorhynchus mykiss, signed and dated 1913, which we saw in the home of CBH's daughter, Claire Hudson Brett, in June, 1989.142 It is very similar to P01499 (Plate 15 C), dated 1912, and somewhat less similar to P04054 (Plate 15B), dated 1911. The 1912 illustration was the last technical illustration of a fish that CBH prepared that may have been intended for publication, and the similar 1913 painting was probably completed shortly after it, and to our knowledge it has not been used in a publication. The 1912 illustration was first published in Bond (1985:135), an announcement for the 1985-89 exhibit, "Drawn from the Sea, Art in the Service of Ichthyology," curated by VGS, and on the poster that accompanied the exhibit. Aside from these publications and our Plate 15 C, we know of no other publications of this illustration.

It is a testament to the quality of CBH's illustrations of fishes that many were republished, even in recent times. For an appraisal of CBH's illustrative contributions, see section "Honors-Awards-Assessments."

¹³⁹The 32 CBH illustrations framed and used in the 1985–88 "Drawn from the Sea" exhibit (more about this exhibit in the text), were under acidfree mats with elliptical openings. These mats did not stain the illustrations.

¹⁴⁰We at first thought it probable that these illustrations were framed for display at the 1898 International Fisheries Exposition in Bergen, Norway, at which CBH was awarded silver and bronze medals. These medals, however were for his illustrations of fishing vessels and a painting of a fishing method. Furthermore, plate 2 in Collins (1901) is a photograph of the section of the USFC exhibit showing framed illustrations of fishes, which were clearly not prepared by CBH: e.g. several portrayed fishes facing right, whereas all CBH fish illustrations show the fish facing left.

¹⁴¹Mention of trade names does not imply endorsement by the National Marine Fisheries Service, NOAA.

¹⁴²She also gave VGS an underexposed 4×5 inch color transparency photograph of the painting, and mentioned that there were two other oil paintings of fishes, "one of my brother's [who is deceased] and one down town ..." (CHB to VGS, 17 Sept. 1985). We do not know what "down town" referred to.



Plate 1.— A, Pimephales promelas, P08158; B, Moxostoma anisurum, P11040; C, Notropis atherinoides, P09407; D, Couesius plumbeus, P03728; E, Macrhybopsis storeriana; P13218; F, Notropis bifrenatus, P09413. For complete information on any individual figure see P number in section "The Illustration Listings."













Plate 5.—Holocentrid fishes: A, *Myripristis amaena*, P09557; B, *M. amaena*, P09548; C, *Sargocentron ittodai*, P01840; D, *S. xantherythum*, P13132; E, *Ostichthys japonicus*, P08806; F, *Sargocentron ensifer*, P13124. For complete information on any individual figure see P number in section "The Illustration Listings."







Plate 7.—Callionymoid fishes (see also Plate 8, A–C): A, B, *Draconetta xenica*, P10048, P10047; C, *Callionymus japonicus*, P17575, inset is female spinous dorsal fin; D, C. *variegatus*, P17581, inset is female spinous dorsal fin; E, C. *caeruleonotatus*, P02327; F, C. *doryssus*, P15709; G, C. *decoratus*, P02349; H, I, C. *valenciennei*, P21866, P17485, inset is female spinous dorsal fin. For complete information on any individual figure see P number in section "The Illustration Listings."







Plate 9.—A, Alectrias benjamini, P00183; B, Stichaeus nozawae, P17579; C, Ernogrammus hexagrammus, P10567; D, Chirolophis japonicus, P17576; E, Opisthocentrus zonope, P17577; F, Chirolophis saitone, P17580; G, Stichaeopsis nana, P17578; H, Bryozoichthys lysimus, P22113; I, Chirolophis tarsodes, P02378; J, Sicyopterus stimpsoni, P04361. For complete information on any individual figure see P number in section "The Illustration Listings."



Plate 10.—A, Bodianus perditio, P14692; B, Coris aygula, P03497; C, Cirrhilabrus jordani, P03198; D, Pseudocheilinus evanidus, P07225; E, Halichoeres bleekeri, P09474; F, Lutjanus synagris, P15116. For complete information on any individual figure see P number in section "The Illustration Listings."



Plate 11.—Cottid fishes: A, *Cottiusculus schmidti*, P03674; B, *Cottus bairdii*, P03723; C, *Porocottus allisi*, P05934; D, *Pseudoblennius zonostigma*, P07220; E, *Ocymectes maschalis*, P08697; F, *Furcina osimae*, P11241. For complete information on any individual figure see P number in section "The Illustration Listings."





Plate 13.—*Calamus bajonado*, P02473: A. 0.71X original painting; B, section of A below anterior 5 dorsal-fin spines, 2.1X original; C, section of A near eye, 2.8X original (sections enlarged to show artistic technique; note use of both watercolors and gouache in C); D, palette of watercolors used in painting A (on piece of paper pasted by CBH on reverse side of illustration board). For more information on P02473 see section "The Illustration Listings."



Plate 14.—A, Caranx crysos, P01919; B, C. hippos, P08206; C, Trachinotus carolinus, P01039; D, Decapterus punctatus, P04163; E, Pomatomus saltatrix, P01035; F, Sander vitreus, P05171. For complete information on any individual figure see P number in section "The Illustration Listings."



Plate 15.—Forms of California Oncorhynchus mykiss: A, O. m. gilberti, P01500; B, O. mykiss, McCloud River, P04054; C, O. mykiss, Scott's Creek, Santa Cruz County, P01499; D, O. m. whitei, P04042; E, F, O. m. aguabonita, South Fork, Kern River, P04043; Volcano Creek, P01787. For complete information on any individual figure see P number in section "The Illustration Listings."



Plate 16.—Salmonid fishes: A–C, Oncorhynchus clarkii henshawi, P0406 (female), P01788 (immature), P04047 (male); D, E, Salmo salar, P04058, P04057; F, Oncorhynchus tshawytscha, P04040. For complete information on any individual figure see P number in section "The Illustration Listings."



Plate 17.—Salmonid fishes: A–D, Salvelinus alpinus, P04059, P04070, P04071, P04072; E, F, Salvelinus aureolus, P04061, P04062. For complete information on any individual figure see P number in section "The Illustration Listings."