IN MEMORIAM: LYMAN BELDING.

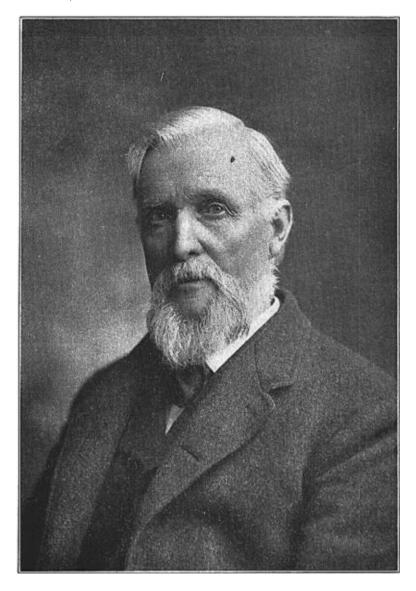
BY A. K. FISHER.

Plate III.

Lyman Belding, the Nestor of California ornithologists, died at his home in Stockton, California, at an early hour on the morning of November 22, 1917, at the age of eighty-eight years and five months. Death came as the result of general weakening of the system, the failing of strength and vitality due to the inroads of advanced age. The yellowing of the leaf, as he would say, advanced to a point wherein the stem no longer kept its hold on the tree of life. At the time of his death he was the oldest ornithologist in America and, with a few exceptions, in the world.

It was shortly after Mr. Belding took charge of collecting data on bird migration in the district comprising the Pacific coast States for the committee of the American Ornithologists' Union, in 1883, that the writer, also a member of the committee, first corresponded with him. Eight years later, in September, 1891, after the Death Valley Expedition, sent out by the Biological Survey to study life in the deserts of Nevada and California, had disbanded, the two met in San Francisco, and there started a long and endearing friendship.

The first impression of Mr. Belding was that of a man of reserve tinged with diffidence; but with the mellowing effect of congenial companionship, this quiet, unassuming gentleman without effort entertained his hearers on widely varied subjects of travel, natural history, adventure, music, sports with rod and gun, and the general affairs of State and current events. With this well rounded equipment, coupled with his genial and lovable nature, there is little wonder that he was so popular and so eagerly sought after by old and young, especially when found in the outing season in his favorite haunts in the Sierras. It always has been a source of much regret to the writer that circumstances prevented him from joining Mr. Belding in his mountain rambling during the period when he was still active with rod and gun.



Lyman Holding

In the past decade we have met almost yearly for a friendly visit and an interchange of ideas and opinions. Formerly, while still able to travel with comparative comfort, he would come to some mutually convenient point, but during the last five years of his life, owing to increasing infirmities, all meetings were held at his Stockton home. On various occasions he talked of his early travels and adventures, and told of many interesting things which had occurred in his experiences from whaling in the Arctic to trout fishing in the Sierras. Realizing that much of this necessarily disconnected narrative was of permanent value, he was induced after some effort to prepare an autobiographical sketch for the entertainment of the writer.

Fortunately this sketch, comprising nearly fifty typewritten pages of legal cap, was completed a couple of years before his death and before eye weakness forbade any literary effort. Notes from this sketch are the basis of this paper and of one prepared by Dr. Walter K. Fisher and published in 'The Condor' for March, 1918. There is little doubt that the stimulative effect of preparing this autobiography, with the necessary delving into the past, was a pleasing diversion for, with the exception of a daily game of whist with a coterie of old friends and an occasional visit to a moving picture theater, there was little to break the monotony of his daily routine, which was of the simplest kind.

Lyman Belding, son of Joshua Belding and Rosetta (Cooley) Belding, was born June 12, 1829, at West Farms, Massachusetts, on the west bank of the Connecticut River, not far from Northampton. From the windows of his home he had a plain view of Amherst College, Mount Tom, Mount Holyoke, and other interesting points. The homely charms of the New England landscape made a deep and lasting impression upon his youthful mind, as shown in later years by comparisons which he liked to draw between them and those of distant lands.

When he was about seven years old, his family moved to Kingston, Wyoming Valley, Pennsylvania. Here, amid mountains and valleys well timbered with deciduous trees, he developed his fondness for hunting, which with him as with many of us, proved to be the forerunner of his ornithological career. The following are his words: "My happiest days were in autumn. The Passenger

Pigeon was very common and its ete-tete, as it rattled down the acorns upon which it was feeding was delicious music to me. I have seen many millions of pigeons in a single day in spring, when, after their usual northern migration, they were driven back by a cold storm. One morning early I was on Ross Hill near Kingston looking for a deer, the tracks of which I had seen in the snow the previous day. Soon after the sun appeared, millions and millions of pigeons flew south over the valley. The flight continued into the afternoon when patches of bare ground began to appear, affording feeding places for the birds. When driven south by cold spring storms the north branch of the Susquehanna River was a favorite route of travel.

"Before I got a gun I often wandered in the woods, sometimes getting home late in the evening, and on one occasion my parents thinking me lost had looked in an open well and other places for me. When I obtained a gun I was out early and late with it, and neglected school, though I worked faithfully on our farm when the crops needed me, except in the autumn when I would occasionally steal away and go to the hills for chestnuts." This love of shooting and of life in the woods and fields endured to the end.

He went to Stockton in March, 1856, and of game seen here and in other parts of California he says: "Game was abundant, including elk, antelope, deer, bear, otter, quail, and waterfowl. have disappeared from the interior valleys of the State excepting a drove on the Miller and Lux Ranch of forty thousand acres in the San Joaquin Valley, and these animals are being captured and distributed to various parks. The elk of this State inhabited the tule marshes mainly, though I have seen many elk horns in the Marysville Buttes, probably left there by elk which came from the marshes of Butte Creek, and I have seen hundreds, if not thousands, of elk horns on the border of the tule swamps north of Stockton. Antelope have entirely disappeared from the Sacramento and San Joaquin Valleys. I saw three in the latter valley a few miles west of Princeton in the summer of 1870 and a single one in Lower California about twenty-five miles south of Tia Juana in the spring Deer were mostly in the mountains, with a few along the rivers where there were extensive thickets on bottom lands. They will continue to be common with proper protection. Very little of their range will ever be cultivated owing to great altitude and soil that is not suited to cereals — I refer mostly to the Sierra Nevadas. I have seen only a few bears in the forest, probably about twenty, and only one undoubted grizzly bear. This I saw in the summer of 1875 when I was fishing on San Antonio Creek near the Calaveras Grove of sequoias. It crossed the stream below and near me and I had a good view of it. The owner of a drove of sheep that ranged in the vicinity told me that he had also seen it. I have been very near many bears but they would slip away unseen. Several of those I saw was when I was in the saddle. The only one I ever shot at was between the middle fork of the Stanislaus River and Beaver Creek, when I had two wire cartridges in my shotgun. My horse wheeled when I shot and the bear ran in the opposite direction to a dense thicket which I did not enter.

"While I was collecting specimens at Crockers, I tried to get a shot at a large bear feeding in a meadow on a plant growing on the border of a rivulet. He had not seen me, and I went to the edge of the meadow, put buck shot in my gun and waited for him to turn to give me a shot. He was a very large bear and the nearer he came to me, the more I realized his size. I had much time to think as he came slowly toward me, and I remembered the only two buck-shot shells I had were not to be relied on as they were old, and I concluded not to shoot at him. When he was about fifty yards from me, he must have smelled me as he turned broadside, sank back on his haunches, held one paw out, cocked his ears forward and sniffed several times. I was greatly relieved when he leisurely walked off toward the river.

"Beaver and otter were plentiful in the sloughs and tule marsh about Stockton. Beaver built houses on the marshes as the muskrats do on the marshes in the prairies of the Middle West. There were several of these beaver houses within three miles of Stockton. They were on land that floated, as much of the peat land does in the tule swamps about Stockton. I shot seven beaver in one day in the flood of 1861 and 1862. I would jar the houses and watch for the cautious appearance of the occupants as they came out to ascertain the cause of the disturbance. They would approach under water to within a few feet of me, just as I had often seen muskrats do when I was a boy, and the only evidence of their presence would be a little circular wave caused by their breathing,

with only the tip of their noses even with the surface of the water. The beaver about Marysville burrowed in the banks of the rivers. Beaver and otter became scarce long ago.

"I went to Marysville to reside early in October, 1862. Small game was abundant. Myriads of ducks and geese came from the north and east of the Sierras in October and November. Butte Creek attracted most of them. The Wood Duck was very common on Feather River and was a constant resident. It is now, as in the country generally, quite rare. The Mountain Plover appeared abundantly on the plains in October. At present it is apparently on the verge of extinction. There were a few deer along Feather River below Marysville and a few in the Marysville Buttes. Mountain Quail came down from the mountains near Oroville and other localities on the eastern border of the valley to spend the winter."

In the autumn of 1849, Mr. Belding nearly succumbed to an attack of typhoid fever, and during a tedious convalescence was still further weakened by malarial fever. On account of his debilitated condition due to these complications his doctor advised a sea voyage to hasten recovery.

After spending nine months with a sister, at Baltimore, Maryland, to partially regain his strength, he sailed for Boston and arrived about July, 1851. He then went to New Bedford and after a few days shipped on the 'Uncas,' which was going to the Arctic for bowhead whales. This voyage lasted three and a half The 'Uncas' arrived at the Azores (about three weeks' voyage from New Bedford), and visited Flores and St. Michael for the purpose of completing the crew. The vessel touched at Cape of Good Hope, St. Paul, Amsterdam Island, New Zealand and Guam, and reached Bering Straits in July, 1852. During the cruise in the Arctic the vessel went north to the 73rd parallel and was successful in securing a full cargo of oil from bowhead whales. When the sun went below the horizon the ship turned south on her homeward journey. A stop was made at Petropavlovsk, a Russian penal colony, for water and the purchase of furs. On arrival at Honolulu, 150 whaling vessels were found anchored there, the greater number of which had been in the Arctic at the same time as the 'Uncas.'

On account of unbearable treatment at the hands of the Captain

of the 'Uncas,' Mr. Belding deserted from the vessel and, after many unpleasant experiences, shipped in the 'Julian,' of Martha's Vineyard, which visited the Cocos Islands, and the Galopagos group for sperm whales. The ship returned to Honolulu in four months with a cargo of oil. In the spring of 1853 he shipped on the bark 'Philomela,' of Portland, which he designated as an old tub, and finally reached home January, 1854.

There is no question that from the time he was a small boy, Mr. Belding took a great interest in birds, especially in their native haunts. In confirmation of this he says: "My love of adventure as well as my admiration of birds was responsible for most of my wanderings. Bird songs always had a great attraction for me and I copied many songs that had regular intervals and could be expressed by our musical system."

It was not until 1876, when he received a volume of Cooper's 'Ornithology of California,' that his slumbering interest burst forth and his activity as an ornithologist began. This stimulus, coupled with the kindly interest and patient assistance of Prof. Baird and Mr. Ridgway, two men who have helped many a bewildered and discouraged beginner over the rough places in ornithology, started him on his collecting career. He often expressed his gratitude for their kind attention and avowed that his zeal for his work was greatly increased by their combined encouragement. Prof. Baird sent him many valuable books and Mr. Ridgway was most patient and prompt in writing him long, interesting letters concerning specimens he had sent to the Smithsonian Institution for identification.

His success in identifying specimens was due partly to his already good knowledge of birds, partly to the excellence of Prof. Baird's descriptions in the 'Ornithology of California,' and in Volume IX of the 'Pacific Railway Reports,' and partly because "north-light subspecies" as yet were not in vogue. He found more pleasure in identifying strange birds than anything else, except, perhaps, in collecting material in the Sierra Nevada. He never went out on a collecting trip, especially on a long one, without taking some of his most needed books, and "volume IX" was always one of them.

In the spring of 1881, Prof. Baird and Mr. Ridgway requested him to visit Guadalupe Island. Accordingly he went to San Diego to prepare for the trip, but reluctantly gave up the voyage after meeting several sealers back from the island who told him of the withdrawal of the Mexican garrison and of the general unsatisfactory condition there.

He then went to the Cerros Island, the second objective, but it was found quite destitute of birds. After a stay of twelve days he went to Scammons Lagoon for the purpose of collecting on the mainland, but the surf was so dangerous he did not try to land. It was here that A. W. Anthony's schooner was wrecked in 1898.

From this point Mr. Belding followed the coast northward, stopping at Santa Rosalia and San Quentin Bays. It was a long distance from anchorage at the mouth of the Bay to the collecting grounds, so that the results were disappointing to Mr. Belding. On this trip he collected specimens of a cormorant which later was named the lesser white crested cormorant (*Phalacrocorax a. albociliatus*) besides a new lizard or two on Cerros Island, and during the latter part of the voyage secured a specimen of the then undescribed Frazer's Oystercatcher (*Hæmatopus frazeri*). At San Quentin Bay he first secured a specimen of the bird that Mr. Ridgway later named *Passerculus beldingi*, in his honor.

The winters of 1881–82 and 1882–83 found him in the Cape region of Lower California where he collected from La Paz to Cape San Lucas, excepting December, 1882, and a part of April, 1883, when he was at Guaymas. He enjoyed collecting in the Cape region, though he endured severe hardships due to the scarcity of water in that semi-desert area.

He considered that he had made the mistake on the first trip, of collecting too great a variety of things of which he knew little or nothing, instead of confining his energies entirely to birds, thus making a second trip unnecessary. In 1881, he took two nests and eggs of Costa's Hummingbird at La Paz, the first eggs of the species ever taken. He found San Jose del Cabo the best field in the low country, and the Victoria Mountains the best in the higher parts. He wondered why the sharp-eyed Xantus had not discovered Geothlypis beldingi along the San Jose River where he spent much time, and he doubted whether he was ever in the Victoria Mountains, or he would have found Junco bairdi and other common birds of the region.

On his second trip, Mr. Belding took only about eighty bird skins for he did not wish many. He consumed nearly a week of time in securing two specimens of *Rallus beldingi*. He only heard of one man at La Paz who had ever seen one, and several hunters were surprised when he showed them one of the birds. These birds inhabit the mangrove thickets, and both specimens were obtained at low tide while in search of food.

Mr. Belding travelled considerably in the northern part of Lower California, and on one of the trips, in May, 1885, collected a specimen of *Sitta pygmæa leuconucha* which he presented to the National Museum several years before it was described elsewhere.

His keen perception caused him to realize at about this time that it would be almost hopeless to continue the study of ornithology with the idea of mastering the subject, unless there were available in California a very complete collection of birds for use in comparison. With the idea of building up such a collection he wrote to many of his California correspondents and advised them to send skins to the California Academy, which he believed to be the proper place for such a collection. The lack of enthusiasm on their part to contribute toward the enterprise and the increasing tendency toward the multiplication of poorly defined subspecies undoubtedly were important factors in discouraging further collecting. He was very quick to notice differences in plumage and proportions but was little interested in specimens that could only be identified when compared with large series and when the locality and date of capture of the specimen had to be known.

It was most unfortunate that he did not come in personal contact with many of the young ornithologists who now are doing such creditable work in the State. Being fond of the companionship of young people it is certain that mutual profit and pleasure would have come from association between this noble gentleman and the young and enthusiastic ornithologists of California.

The forests, streams, and meadows of the Sierras were his special delight and after advancing age made it more and more difficult to travel as each year rolled by, he dreamed of the by-gone days and was resigned.

Of these mountain playgrounds of his, we may quote from an article of his in 'The Condor'; (Vol. II, p. 4, 1900) as follows:

"The pleasantest days I have spent since 1876 have been in the mountains of Central California. Since that time I have been in these mountains the most of each summer. I couple deer, grouse and quail hunting with bird study. At first I tried to connect botany with ornithology, but I could not look on the ground for plants and in the trees for birds at the same time. The ornithologist should, however, know the prominent plants at least. During my rambles I have noticed the hardiness of some of our mountain annual plants. I have seen the mercury down to 22 degrees on two successive mornings and no trace of frost afterward, except that a few of the tenderest ferns were killed. I suppose this may be owing to dry air and cool nights, the latter preventing the rapid growth and consequent tenderness of kindred plants grown where both days and nights are warm.

"The first eggs I collected were about on a par with my first bird skins. I picked a hole in each end with a pin, never having seen or heard of egg drills and blow-pipes. Eggs of Townsend's Solitaire and others quite as choice were thus punctured. I believe I took the first eggs of the Solitaire, which were sent to the National The nest is composed almost wholly of pine needles and can readily be distinguished from any other nest of the Sierras. It is usually on the ground, but I have seen one in a hole in a stump about a foot from the ground. Perhaps there is no part of the world more interesting than the high Sierras of Central California. Neither Heermann, Gambel, or Xantus explored them. Mr. Bell got the Round-headed Woodpecker in Calaveras or Tuolumne county, but this he could have done at an altitude of 2500 feet or less in winter. Prior to 1876 these mountains had hardly been touched by the ornithologist, the route immediately along the Central Pacific Railroad and about Lake Tahoe being the only part that had been visited. Considerable work had been done south of Tehachapi; Newberry had followed the Sacramento River to the Klamath Lakes and northward, and Capt. Feilner had collected at Fort Crook and about Mount Shasta, but the mountains in the central part of the State had been neglected.

"If any of the young ornithologists of this State have not visited these mountains in summer they should miss no opportunity to do so. My most interesting observations have been those of evenings and moonlight nights in some secluded part of the forest where large game was abundant. I have often heard the Pygmy Owl, which Mr. Ridgway correctly says is diurnal and crepuscular and have quite as often heard the Flammulated Owl, which is strictly nocturnal and hard to get. I have only taken one specimen. The Western Barred Owl has never ceased to interest me, for it is quite familiar and seems to have a fondness for talking back! By imitating its shrieks and dog-like barkings, I seldom fail to get a response."

Mr. Belding being preëminently a field ornithologist and primarily interested in birds in their native haunts accounts in part for the disparity between the work he accomplished and the amount of material published. One of his earliest and longest papers appeared in the 'Proceedings of the National Museum' in 1879, entitled 'A Partial List of the Birds of Central California' and included observations made in the Sacramento and San Joaquin Valleys from Marysville to Stockton and on the western slopes of the Sierras. It covered sixty one pages and included annotated notes on 220 species.

'The Birds of the Pacific District,' appearing in 1890 as one of the series of 'Occasional Papers' of the California Academy of Science, was one of Mr. Belding's best-known, and most important publications. It was based on material from California, Oregon, Washington, and Nevada furnished by migration observers of the American Ornithologists' Union. Although many observers furnished data, a very important part of the work was contributed by Mr. Belding himself. His intimate knowledge of the region and his well-known accuracy make this volume one of the standard publications relating to the birds of the Pacific Coast. The manuscript, which contains much material not in the published volume and a similar report on the waterfowl which was never published, are deposited in the Bancroft Library of the University of California.

It is only logical that a man who had collected so much zoölogical material, over wide and little-known regions, would have species dedicated to him, and we find five birds and four other vertebrates named after Belding.

When the American Ornithologists' Union was founded in 1883,

Mr. Belding was elected an Active Member and remained as such until 1911, when at his own request he was made a Retired Fellow. He was elected a member of the California Academy of Sciences, March 4, 1889, life member March 4, 1914, and honorary member of the section of ornithology of that institution, February 7, 1898. He became an honorary member of the Cooper Ornithological Club in 1896. He took a keen interest in these three societies and gave them his warm and substantial support.

About 1867 he married the widow of his brother, and a daughter. Josephine M., was born to them. She inherited the tastes of her father, being interested in music, birds, flowers, and all out-of-door life. Her fine nature made her a favorite among relatives and associates. She died January 24, 1917, ten months before her father passed away.

To many of the younger ornithologists Lyman Belding, because of his early retirement from active ornithology, is a name and an inspiration only, but to the older men, especially those who have been favored by his friendship and close association with him, his death brings sorrow. This sadness and feeling of loss, however, will gradually fade away and be replaced by fond memories of a departed friend, a stalwart citizen, an ardent sportsman and a nature lover.

His remains rest peacefully in the Rural Cemetery at Stockton, his old home, where much of his active life was spent.

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U. S. Biological Survey, Washington, D. C.