

is published in our columns of Dec. 17, 1891, and an outline is given showing its curious form. As for the colors of the opah, words can only feebly express their splendor. It would be difficult to find a fish on the California coast which has greater interest to students and to museum collectors.

THE NEW YORK GAME BILL.

THE Gould bill was reported in the New York Assembly last Thursday. From an advance printed copy the following summary of its more important provisions is given:

FISH COMMISSIONERS—GAME PROTECTORS.

FISH COMMISSIONERS.—The Governor shall appoint five commissioners of fisheries to serve one, two, three, four and five years respectively, subsequent terms to be for five years. (Requirement that one commissioner must be appointed from each judicial district stricken out.) The chief office shall be in Albany, but there may be a branch office in New York City.

GAME PROTECTORS.—The Commissioners of Fisheries shall appoint twenty game protectors, who shall be subject to the control of the Commission and may be summarily removed by it. The chief protector's office shall be at Albany. Salary of chief \$2,000 per year, with \$100 for traveling expenses. Salary of others, \$500, with \$40 allowed for traveling expenses. One-half of penalties collected shall go to protectors.

On recommendation of supervisors or any incorporated society for protection of fish and game the Commissioners may appoint special protectors, who shall have the same powers as the State protectors. Peace officers shall have same powers as game protectors. It is the duty of every protector to seize and summarily destroy forbidden nets and illegal fishing devices, which are declared to be a public nuisance. The expense of such seizures shall be a charge against the county.

GAME ANIMALS.

DEER.—Deer shall not be hunted or killed between Nov. 1 and Aug. 15. Venison shall not be sold or possessed between Nov. 15 and Aug. 15; possession between Nov. 1 and Nov. 15 is forbidden, and shall be deemed a violation, unless it shall be proved by possessor or seller that such venison was killed legally or out of the State. No fawns shall be killed at any time. (Prohibition of killing does has been taken out.) Traps and devices, including salt-licks, for added and taken out shall not be caught, hunted or killed by aid thereof. One per-on may take only two deer in a season.

Sec. 44.—Deer shall not be hunted with dogs between the eleventh day of October and the tenth day of September following. Dogs of the breed commonly used for hunting deer shall not be permitted by the owner or person harboring the same to run at large between such dates. In the forest where deer inhabit, deer shall not be hunted with dogs in the counties of St. Lawrence, Delaware, Greene, Ulster at any time, or in Sullivan county between the first day of December and the first day of October. Sec. 45. Dogs chasing deer in violation of this act may be killed.

Transportation of deer or venison forbidden from or through any county, except that one carcass may be transported from county where killed when accompanied by the owner. Possession by common carriers, unaccompanied by owner, is a violation. Prohibition does not apply to head and feet or skin. Crusting deer is forbidden. Moose, caribou and antelope shall not be hunted, killed, possessed or sold in the close season for possession of venison.

HARES AND RABBITS shall not be killed between Jan. 1 and Sept. 1; nor shall they be caught in traps, nor traps set for them.

BLACK AND GRAY SQUIRRELS shall not be killed between Jan. 1 and Sept. 1.

SUNDAY.—Shooting, hunting, trapping and caging birds or wild beasts on Sunday is forbidden.

PENALTIES for violation of deer law, fine of \$100; other sections \$25.

BOUNTIES are provided of \$10 for a bear, \$30 for gray wolf, \$15 for pup wolf, \$20 for a panther. (No bounty for a fox.)

GAME BIRDS.

WILDFOWL.—Web-footed wildfowl, except geese and snipe, shall not be pursued, shot at, hunted, killed, possessed or sold between March 1 and Sept. 1; nor pursued between sunset and sunrise. Shall not be hunted, save with shoulder-gun, nor from any boat other than one propelled by hand, nor floating device, nor by use of bough-house more than 50ft. from shore.

QUAIL shall not be killed between Jan. 1 and Nov. 1; nor sold or possessed between Feb. 1 and Nov. 1; possession between Jan. 1 and Feb. 1 forbidden unless possessor shall prove the lawful killing.

WOODCOCK AND GROUSE.—"Woodcock, ruffed grouse, commonly known as partridge, or any member of the grouse family" shall not be killed between Jan. 1 and Sept. 1. Possession and sale forbidden between Feb. 1 and Sept. 1; possessor between Jan. 1 and Feb. 1 must prove lawful killing. Transportation from any county is forbidden, except from county where killed when accompanied by owner. Possession by common carrier for transportation shall be a violation unless birds shall be proved to have been killed out of the State.

PILOVER AND SNIPES.—Wilson's [bill reads "Willow's"] commonly known as English snipe, plover, mud hen, gallinule, grebe, bittern, surf bird, curlew, water chicken, bay snipe or shore birds shall not be killed between Jan. 1 and Sept. 1.

OTHER WILD BIRDS, not named in this chapter, shall not be killed at any time; nor their nests destroyed, but this shall not include the English sparrow, crane, crow, raven, crow-blackbird nor kingfisher.

ROBINS, BLACKBIRDS AND MEADOW LARKS shall not be killed between Jan. 1 and Nov. 1.

SNARING OR TRAPPING grouse and quail is forbidden; no snare or trap shall be set; it is a public nuisance and may be summarily destroyed.

PENALTIES for violations of any of these provisions is a fine of \$25 for each bird killed, trapped or possessed.

COLLECTORS may obtain permits from an incorporated society of natural history or from the Regents to collect bird specimens for scientific purposes.

LOCAL GAME LAWS.

RICHMOND COUNTY.—Non-residents are forbidden to shoot without a license from a Justice of the peace, fee \$10.

WOODCOCK shall not be killed in Lewis, Warren, Fulton, Hamilton and Saratoga counties between Jan. 1 and Aug. 1.

LONG ISLAND.—The following provisions apply to Kings, Queens and Suffolk counties: Web-footed wildfowl, except willow geese and brant, shall not be killed between May 1 and Oct. 1; nor at any time between sunset and daylight. Floating devices for shooting wildfowl may be used on Long Island Sound, Great South Bay west of Smith's Point, and the Peconic bays; in any part of these counties boats propelled by hand may be used, and sailboats on Long Island Sound, Gardiner and Peconic bays. Plover, Wilson's (commonly known as English) snipe, rail, sandpiper, mudhen, gallinule, bittern, surf bird, snipe, curlew, water chicken, bay snipe and shore birds shall not be killed between Jan. 1 and July 1. Woodcock and ruffed grouse (partridge) shall not be killed except between Jan. 10 and Nov. 10, nor sold between Feb. 1 and Nov. 10. (On Robins Island quail may be shot between Oct. 14 and Feb. 1.) Hares and rabbits shall not be killed between Jan. 10 and Nov. 10. Deer shall not be hunted or killed for five years from Aug. 14, 1892, except from Nov. 10 to 16 inclusive. Black and gray squirrels shall not be killed between Jan. 10 and Nov. 10. Where an act is prohibited between certain dates, it is not lawful upon the date first named and is lawful upon the date last named.

FISH.

FISH.—It is forbidden to pollute any waters of the State with dye stuff, coal tar, refuse from gas-houses, sawdust, shavings, tan-bark, lime or other deleterious sub-stances, "in quantities destructive to the life of or disturbing the habits of fish inhabiting the same." It is forbidden to take fish by drawing or shutting off any water; or by any device except angling. The use of dynamite or other explosive is forbidden, except for mechanical and mining purposes. No trout of any kind, salmon trout or land-locked salmon shall be taken from any of the waters of this State for stocking a private pond or stream. Fishing through the ice is forbidden on any waters inhabited by trout, salmon trout or land-locked salmon.

Trout of any kind shall not be taken between Sept. 1 and May 1. No trout of any kind, salmon trout or landlocked salmon of less than six inches in length shall be taken. No trout, salmon trout, or landlocked salmon shall be disturbed on the spawning beds.

SALMON TROUT AND LANDLOCKED SALMON shall not be taken between Oct. 1 and May 1.

TRANSPORTATION.—Trout of any kind, salmon trout and land-

locked salmon, caught in any of the waters of the State shall not be transported from any county except when accompanied by the owner.

BLACK BASS OR OSWEGO BASS shall not be taken between Jan. 1 and May 30. No black bass of less than 8in. in length shall be taken.

MUSCALLONGE shall not be taken between Jan. 1 and May 30. SALMON shall not be taken between Aug. 15 and March 1; nor shall any salmon be retained of less than 18in. in length.

SIZE OF MESHES.—The use of seines, pound-nets, gill-nets or fykes, the meshes of which shall be less than 1 1/2 in. bar, is forbidden.

SALMON TROUT, or lake trout may be sold at any time, if not taken in close season; possession between Oct. 1 and May 1 is forbidden unless possessor proves lawful capture.

FISHWAYS.—Signboards erected by the State shall be maintained at 50 rods from a fishway, and fishing within that limit is forbidden.

FISH PROPAGATION by the commissioners and the operation of private hatcheries are not affected by any foregoing provisions.

PENALTIES.—The penalty for polluting waters, taking fish by drawing off water, or use of dynamite, is a fine of \$100; for taking trout or bass of unlawful size \$10 for each violation; for violations of other provisions, \$25 for each violation and \$10 for each fish.

ADIRONDACK FISH LAWYING.—No fish except trout, Adirondack troutfish or landlocked salmon, shall be placed in Adirondack waters (unless the fish are non-preying or non-destructive, such as usually contribute food for the species named) except under immediate supervision of the Fish Commissioners.

LOCAL FISH PROVISIONS.

No fish shall be taken except by angling in the St. Lawrence and Niagara rivers, and Lake Champlain, nor in Lake Erie within one-half mile of the shores of any island, nor in Lake Ontario within one mile of the shores of any islands, except that in the county of Oswego they may be taken one-half mile from shore. ("The waters of Lake Ontario in the county of Jefferson includes between Pillar Point, in the town of Brownville, and the town line between the towns of Lyme and Cape Vincent, including the waters of the Tugay, Three Mile Bay, and Lake Ontario between the provisions of this act.") except that bass may not be taken between Jan. 1 and May 30, nor of less length than 8in. Possession of fish unlawfully taken is forbidden.

Fishing through the ice is permitted in Lakes Ontario, Erie and Osego; Rondout Creek below Honk Falls; the Hudson and Niagara Rivers.

In Lakes Erie and Ontario the meshes of nets shall not be less than 2in. bar.

Taking fish by any means other than angling is forbidden in Rondout Creek and in the Hudson River above the dam at Troy, save as follows. Shad and herring shall not be taken from Rondout Creek or Hudson or Delaware rivers between June 15 and March 15; nor shall shad nets be permitted to remain in said waters from sunset on Saturday until sunrise on Monday between March 14 and June 15 shad and herring may be taken by nets; and between Sept. 1 and May 30 bullheads, catfish, snnfish, suckers, eels, pickerel, sturgeon, white and yellow perch may be caught by hoop-nets, fykes and gill-nets in the Hudson River and Rondout Creek below Honk Falls.

Salmon, black bass, trout, salmon trout and pike-perch caught in nets in the Hudson River shall be thrown back.

In Raritan Bay and adjacent waters in Richmond county no device except angling shall be used for taking fish. In the Harlem River or East River or adjacent waters nets shall not be used.

In Black Lake, Mud Lake and Yellow Lake in St. Lawrence county, bullheads, eels, suckers, catfish and pickerel may be caught with spear, except during March, April and May, and pike in Lake Champlain, in Essex county. It shall be lawful to fish for suckers, bullheads and pickerel with nets and fykes, to shoot or spear them through the ice, in any waters of Warren county except Schroon Lake and Long Pond or Glen Lake.

In Champlain, Seneca, Cayuga, Keuka, Canandaigua, Skaneateles and Oswego lakes, bullheads, catfish, eels, suckers, perch, pickerel and sunfish may be caught by hook and line through the ice.

In Oneida River eel weirs may be maintained of lath not less than 1/2 in. apart, with clear passage way, at low water, of not less than 10ft.

Black bass shall not be fished for in Lake George between Jan. 1 and May 30, nor in Black Lake, St. Lawrence county, between Jan. 1 and May 30.

Minnows for bait may be taken in any waters not inhabited by trout by nets not exceeding 40ft. in length.

In Coney Island Creek and waters of Gravesend Bay, one-half mile each way, the meshes of nets shall be not less than 4in. square (except hoop-nets for founders between Oct. 14 and April 1).

In Spring Brook, in Morris and Livingston counties, trout shall not be taken between Sept. 1 and April 1.

In the Susquehanna River and tributaries wall-eyed pike, yellow bass and pike shall not be taken between Nov. 1 and May 30.

In the waters of Queens and Suffolk counties (Long Island) trout shall not be taken, sold or possessed between Sept. 1 and April 1; salmon trout and landlocked salmon between Oct. 1 and April 1; black bass between June 1 and May 30; in Jamaica Bay and the inlet thereof fish shall not be taken by any means except angling, which shall be lawful on any day of the year between April 1 and Dec. 1.

For full text of important sections see next issue.

MASSACHUSETTS FISHERIES AND GAME.

THE twenty-sixth annual report of the Commissioners of Inland Fisheries and Game contains much interesting information for anglers. All the fishways reported upon are in good working order. The way at Lawrence was passed by various kinds of fishes, at first by suckers and alewives, followed by lampreys, salmon, chubs, eels and black bass. In all 66 salmon were seen in the fishway, the first on June 12 and the last on July 31. The number of salmon is smaller than last year, but the catch at Plymouth, N. H., for spawning purposes was 75, an unusually large supply. Black bass are increasing rapidly in the Merrimack and the Concord. The State received about one-half million trout eggs for its share of the joint work at Plymouth and 200,000 additional were bought. The Commissioners expect to have about 500,000 young trout for distribution in April and May next. The number planted in 1891 was 580,000. A new hatchery is now under construction at Sutton, Worcester county, which will greatly enlarge the capacity for trout production. Col. E. B. Hodge, who has charge of the Plymouth hatchery, planted 200,000 salmon fry developed from eggs taken from native Merrimack River salmon, besides 132,000 hatched from eggs obtained from Bucksport, Me. These were deposited in the Pemegwasset from one mile to twenty miles above Livermore Falls, before the yolk sac was fully absorbed. Col. Hodge firmly believes that the fry have a better chance to exist on natural food than by means of any kind of artificial sustenance. The largest salmon taken at the Falls weighed 39lbs. and, as usual, more males than females were secured. Brook trout began spawning in July and August, but no ripe males could be found, and the loss of eggs was very large.

In the investigation of the reproduction of the lobster, it was found that the bulk of the eggs are deposited in June, July and August, and that little progress is made in the development of the embryo until the water reaches a temperature of 55 degrees. The eggs begin to hatch at a temperature of 55 degrees. The experience of the Commissioners led them to adopt the plan of planting egg lobsters in suitable places in order to stock the waters. Great difficulty was experienced in preventing the capture of undersized and egg-bearing lobsters. More than 14,000 of these were taken from sunken cots by Capt. Procter and liberated in depleted waters. Some of the fishermen engaged in this illegal traffic were taken from their vessels, prosecuted and fined. The number of lobster eggs planted along the coast was about 138,000,000.

The report of the conference of the Fish and Game Commissioners of the New England States, which is published in the appendix, contains many interesting discussions on matters of public importance. Among other things, the black bass is treated at considerable length. In New Hampshire the open season for this fish begins June 15. Commissioner Hodge admits that this may be a little too early, but as June is almost the only month in which fly-fishing for black bass can be had, the law is defended. In Massachu-

sets the season opens July 1, while in Maine the bass is without protection and there is an unreasonable prejudice against the fish, which is by no means shared by summer visitors to the State who are attracted there by the bass fishing. In Connecticut, also, there is a crusade against the black bass, and the farmers are debating how to get rid of this fish in small ponds and lakes. One of the objections to it in this State is that it destroys the pickerel, and only one application for black bass was received by the Connecticut Commission in 1891.

MINNESOTA GAME AND FISH.

BY courtesy of Mr. W. F. Dealing, of Minneapolis, we print, in advance of its official publication, the full report of the Minnesota Game and Fish Commission.

The Minnesota Commission of Fisheries (William Bird, of Fairmont, Niles Carpenter, of Rushford, and Robert Ormsby Sweeney, Sr., of Duluth) was organized in 1874; and was superseded and re-organized May 5, 1891, by the Game and Fish Commission of Minnesota as now constituted: Pres., Robt. Ormsby Sweeney, Sr., Duluth; Vice-Pres., W. S. Timberlake, St. Paul; Treas., W. P. Andrus, Minneapolis; Rec. Sec., A. E. Ferris, Brainard; Wm. Bird, Fairmont. The report is as follows:

Hon. Wm. R. Merriam, Governor of Minnesota:

Herewith I have the honor to lay before Your Excellency the eighteenth annual report of the Fish Commissioners' operations—but perhaps more properly the first report of the Game and Fish Commissioners of Minnesota, which also includes the work of the last months of the older State Fish Commission, as organized originally in 1874, and which by act of last Legislature merges into the present organization, with its broader scope and complete guardianship of all pertaining to the game and fish within the broad domain and jurisdiction of Minnesota.

In compliance with the law creating it, the new board met May 5 at the Capitol building, and the organization was completed by the election of officers and appointing warden and superintendent. Mr. Frank L. Stetson, of Minneapolis, was appointed State Game Warden and Mr. Thos. S. Watkins Superintendent of Fisheries. These gentlemen were selected for their respective positions from a large number of candidates and for their fitness alone.

The first duty of the new board was to acquaint themselves with the condition of the property, apparatus and equipment in their possession. For this purpose the entire board visited the hatcheries and grounds at Willow Creek and found them internally serviceable, but externally greatly in need of repair. The reason given was that the old board did not care to go to great expense on repairs until the lease of the grounds, which was about to expire, could be renewed, and second, financial stringency, having only funds enough for the proper propagation and distribution of the fish in territory already planted, and nothing for new territory. For these reasons the walks, fences, grounds, etc., showed the need of repairs and closer attention.

The board have secured a new lease of ten years of the premises, at an annual rental of \$400 for the first five and \$600 for the succeeding five years. With this new lease, we propose to repair the buildings and fit up the grounds in a manner creditable to a worthy State institution, and we have accordingly expended the modest sum of \$2,500 in the pleasing and attractive place now presented. Superintendent Watkins had charge of the work.

The new law authorized the board to appoint four deputy wardens, but for financial reasons it was deemed inexpedient so to do, but instead have appointed special or local deputies in various counties where needed, without stated salaries, but with their legitimate expenses paid when in discharge of their duties, and a reward (general) of \$35 for conviction of violators acted as incentives for them and other civil officers to take a more active interest in the matter and secure greater respect for the law.

We find that the effect of the new law has been as a whole beneficial. There are defects in it, however, omissions and deficiencies from time to time and some occasions most provokingly. We are glad to say the community generally uphold and approve its requirements and commend its enforcement, particularly in the older and more thickly settled portions of the State.

As we reach out into newer counties we find an element who are impatient of the least restraint upon their lawless inclinations, reckless disregard of law, and defiant and threatening attitude assumed against the wardens or any one interfering with their indiscriminate slaughter of both fish and game.

WHO ARE THE VIOLATORS?

First, a class of "fellows," young and old, who, armed with a cheap gun, and a desire to be classed as a sportsman, go out at unlawful seasons and wantonly slaughter the young birds before they have left the nest. This class are very cowardly and a round fine will generally put a quietus on their "hunting," especially in that particular locality.

Second, are those who associate with, and presumably are, gentlemen, and offer the very tame excuse that the other class spoken of are securing the best of the game, and a few birds or deer cannot make much difference. This class being more intelligent are more wary and consequently harder to control, but, fortunately, fear arrest, so that violations from this class are becoming less frequent.

The greatest injury and devastation to the game and fish in our commonwealth are perpetrated by the professional hunters and fishermen, who are simply organized banditti sent out by the game and fish dealers, not only of our own State, but agents of dealers in other States, the use of every forbidden and evil device known to the craft to secure the game in quantities, regardless of the age, size and condition. They operate in gangs of from three upward, have complete camping outfits, tents, nets, guns, etc. They are thoroughly posted as to the best places to carry on their nefarious work, and there they stop until every living thing in the game line is practically exhausted, or until they are routed out by the wardens, or, as rarely occurs, by indignant citizens. I say rarely advisedly, for we are told by citizens, every little while, of violations, notably at White Bear and Bald Eagle lakes, and that it "has been going on for years;" you suggest a prosecution and they simply refuse to testify "for fear of bodily harm and damage to property."

Many of these violators carry on so prosperous a business that they have confederates conveniently located within telegraphic reach to notify them of the approach of danger. An instance occurred on the Duluth & Winnipeg R. R., at a time when one of the wardens was buying a ticket of the agent at Cloquet he was "spotted" and the "gang" was notified of the warden's approach. When he arrived at the grounds the parties were found quietly fishing with hook and line, but patient search brought forth the nets, which were soon rendered unserviceable. It was ascertained beyond doubt that nets had been furnished by some of the local dealers in the neighborhood of this illegal work, and one of the specials interviewed one of them, when the following almost verbatim conversation was held:

"Good morning, Mr. —. I'm just thinking I'd get a net or seine of some kind, but I haven't got any money; I just want to know what I can do with you; Bill — and French — told me they got their nets here." Dealer—"Yes, I believe we did let them have some nets. Your having no money don't matter. If you'll give us security for the net we'll let you take it. Where do you think of going?" "I ain't quite made up my mind of two or three good places I hear are pretty good fishing points." "Have you any friends

Continued on page 217.