

WOULD THERE BE MORE FUN IN THE FIELD IN A DAY?—One revolution of the earth on its axis is called a day. A day is divided into twenty-four parts called hours. Each hour is divided into sixty minutes, and each minute is divided into sixty seconds. The day is again divided into two equal parts of twelve hours each. This division is arbitrary and productive of no little confusion. It is two days in one day. Various attempts have been made to remedy this defect, but none have succeeded. The railroads sought to abolish the two tables and make one of twenty-four hours, regulating all time and time machinery accordingly; but for some reason nothing has come of it. Perhaps its effect on all chronometers prevented its introduction. An innovation that would invalidate all the timepieces of the world would not readily be submitted to. A remedy is near at hand, and perhaps from its very simplicity has been overlooked. Double the length of the hour, minute and second, and regulate all time machinery down to one-half its present velocity. That would meet all difficulties now existing, and increase the value of all chronometers. They would run slower, last longer and do better service, and A. M. and P. M. would retire.—LEVI S. KLAGLE (Vinton, Ia.).

DUCKS IN FISHING NETS.—Erie, Pa.—Unluckily, though the Pennsylvania game laws protect the ducks along our shore of Lake Erie from gunners in the spring, they do not keep them out of the gill-nets of the fishermen. Nearly every tug and smack coming in from the nets of late have had a goodly number of plump bluebills and other ducks aboard. The fishermen are not pleased at these catches—as might be at first expected that they would be—the damage the ducks do to the delicate nets is so great. As I have written before, the price the drowned birds bring does not recompense the fishermen for the damage they do. Bluebills from the nets are offered on our street market at 15 cents each, and do not find purchasers. And when large numbers have been shipped East to commission houses, they have almost invariably been thrown back on the senders' hands.—MAL-LARD.

OUR WILD GOAT PICTURE.—The author of the wild goat hunting relation (issue of April 7) writes of the illustration: "Mr. Seward is to be congratulated on his success of his photograph. I had good opportunity to observe the goats lying down, feeding and moving about undisturbed; and can say that the picture is true to life, and the surroundings are perfect. We have four persons in this place who have hunted the wild goat; and they all unite in praise of the picture. My brother, who hunted the wild goat near Mt. Baker, Wash., had a fine opportunity to observe some old bucks sitting upon their haunches, a habit they frequently indulge in when disturbed by anything unusual in sight. If I go West this fall, shall try to get my camera up in the range and secure some pictures from life.—E. H."

LARD AS A CONCENTRATOR.—"The next time you load any shells," a friend told me, "put about a spoonful of melted lard on the shot. The lard will run down through the shot and harden, making a regular slug." Two days later I set out with several shells loaded with slugs made of No. 6 shot and lard. A crow sat on a big dead pine seventy-three good paces away. I shot at him and he died. Seventeen shots had pierced his side and head. Shots at a paper 10x12in., at 80yds., showed an average of twenty-three shot in them.—RAY SPEARS.

LINNÆAN SOCIETY OF NEW YORK.—Regular meetings of the society will be held at 8 P. M. at the American Museum of Natural History, Eighth avenue and Seventy-seventh street, on May 4 and 18. May 4.—Remarks by Mr. F. M. Chapman on a recent trip to Cuba. May 18.—Remarks by Dr. C. S. Allen on a recent trip to Florida. Reports by the members on the spring migration.—ARTHUR H. HOWELL, Sec'y, 212 Madison street, Brooklyn.

THE NATIVES OF TIERRA DEL FUEGO catch seals with a decoy of seal-skin stuffed with grass, which they draw through the water by a thong, imitating at the same time to great perfection the bellow of the animal. Birds they catch at night by torch-light, letting themselves down the cliffs by ropes of leather, and fish they take in nets made of sinews of the guanaco.—*Scottish Geographical Magazine*.

MICHIGAN SNIPE.—East Saginaw.—A good many snipe have been shot around Saginaw this spring, but as I do not believe in spring shooting I have not been out.—M.

THE NEW YORK GAME BILL.—Albany, May 2.—[Special to Forest and Stream.]—Governor Flower has not yet signed the game code.—M.

Notes of The Season.

It is to be hoped that the man who draws a loaded gun toward him muzzle first will shoot no one but himself. Any way he has no business with a loaded gun at this season.

Now is the time when the old adage is reversed, and a bird in the bush or marsh is worth two in the hand, and two spared now may prove a dozen in the hand in the fall. A WAHOOSE.

Map of the United States.

A large, handsome map of the United States, mounted and suitable for office or home use, is issued by the Burlington Route. Copies will be mailed to any address on receipt of twelve cents in postage by P. S. EUSTIS, General Pass. Agent, C. & B. Q. R. E., Chicago, Ill.—*Adv.*

THE TENT YOU WANT.—If you need a new tent for your camping trip this summer, it will pay you to investigate the "Protean Tent," elsewhere advertised in these columns. It is far better for the purpose than any other tent, and will add much to the pleasure and comfort of your outing.—*Adv.*

A BOOK ABOUT INDIANS.—THE FOREST AND STREAM will mail free on application a descriptive circular of Mr. Grinnell's book, "Pawnee Hero Stories and Folk-tales," giving a table of contents and specimen illustrations from the volume.—*Adv.*

A certain well-known angler was playing an active salmon. "Land him, sir, land him, or he'll break your lines," shouted the guide. "Can't do it, can't do it," returned the fisherman composedly. "Wells's Manual" says I must run him at least ten minutes. And he lost his fish.—*Boston Journal*.

Sea and River Fishing.

THE FULL TEXTS of the game fish laws of all the States, Territories and British Provinces are given in the *Book of the Game Laws*.

Trout Near New York.

WE have secured, for the private information of the readers of FOREST AND STREAM, knowledge of a number of streams and lakes easily accessible from this city, where we believe that good fishing for trout and black bass may be had. The information, much of which comes from private sources, we are not at liberty to print, but we shall be glad to furnish it without charge to any reader of FOREST AND STREAM who will apply for it, either personally or by letter.

PACIFIC SALMON AND TROUT.*

A HIGHLY interesting, popular account of the salmon and trout of the Pacific Coast of the United States, from the pen of Dr. D. S. Jordan, has been issued as Bulletin No. 4 by the Board of Fish Commissioners of California. This article condenses into 15 octavo pages a vast deal of information of value to anglers and students generally.

Dr. Jordan says: "Of all the families of fishes, the one most interesting from almost every point of view is that of the *Salmonidae*, the salmon family. It is not one of the largest families, comprising less than a hundred species, but in beauty, activity, gaminess, quality as food, and even in size of individuals, different members of the group stand easily with the first among fishes.

Salmonidae are found in the north temperate and Arctic regions, and are everywhere almost equally abundant wherever suitable waters occur.

"All the *Salmonidae* feed upon fish; the smaller ones upon worms, insects and small fish; the larger forms on fishes and crustacea—whatever they they can find.

"Naturalists divide *Salmonidae* into nine genera: *Coregonus*, the whitefish; *Plecoglossus*, a little annual fish which is found in the waters of Japan, born in the spring, runs up the rivers in the summer, and dies in the following winter, only the young surviving; *Brachymystax*, a large and scarcely known salmon-like fish in the waters of Siberia; *Stenodus*, the inconnu, a large, weak-toothed salmon found in the Mackenzie River; *Thymallus*, the grayling; *Hucho*, the Huchen, or Rothfisch of the River Danube, a large, voracious, pike-like salmon, which seems to be little known either to naturalists or to anglers; *Oncorhynchus*, the Pacific coast salmon, or quinnats; *Salmo*, the salmon and trout; and *Salvelinus*, the charr, or red-spotted trout. Of these the various fishes commonly known as salmon and trout belong to the last three genera." Dr. Jordan then gives the source of the common names.

Salmo, from *salio*, to leap. *Fario* (Forelle of the German), trout of Izaak Walton and all English writers. The Latin word *Trutta*, from which the name trout, *Salmo trutta*. The Doctor remarks that there are in England, whence our names have come, "three species of black-spotted silvery fishes of this family: (1) The salmon, largest of all and anadromous; (2) The trout, living in the brooks and the lakes only; (3) The salmon trout, which stands between the two. All three belong to the genus *Salmo*, and the only difference of any importance between the salmon and the trout, so far as structure goes, lies in the fact that the salmon sheds the teeth on its vomer, that is the middle part of the roof of its mouth, as it grows older, while in the trout these teeth are preserved throughout the life of the animal. Living in salt water and feeding on large fishes and crustacea, the salmon is the more vigorous, with coarser and more oily flesh, but this difference becomes of small importance as a matter of distinguishing species." Then the charr of England is mentioned, known as saibling in Germany and ombre chevalier in France. The generic name is *Salvelinus* (the same including our brook trout), and is a sort of diminutive of *Salmo*, meaning a little salmon. The name ombre is given in allusion to its dark colors and love of shady places in the lakes and brooks.

"Armed with these names of salmon, trout, salmon trout and charr, our ancestors came to America." The name charr was little known, and has probably never been in common language applied to any American fish. "In the fresh waters of New England and New York, in all the clear streams throughout the Allegheny region, and in the lakes of Canada and the Northwest, our forefathers found a red-spotted, fine-scaled, dark-colored, speckled beauty. Finding no real trout with black spots and large scales in the rivers, and having forgotten the name of 'charr,' they gave to this fish the name of trout, or speckled trout, or brook trout, and in spite of the fact that in reality it is not a trout, but a charr, the name of brook trout is likely to adhere forever to the *Salvelinus fontinalis*.

"Real trout there are none on our Atlantic coast, and salmon trout is likewise wanting, but the name salmon trout is often given to the brook trout, or charr, which has run out into the sea." This name is applied also, and more generally to the lake trout (*Salvelinus namaycush*).

"In the lakes of Greenland and the eastern part of British America, the European charr (*S. alpinus*), is as abundant as it is in Europe—a fact which has been only lately made manifest, and even yet there is some question whether some of these which are found in the lakes in New Hampshire have not, some time or other, been brought over and planted there from Europe." To the Pacific coast were taken the names used in the East, and besides the salmon the settlers found an abundance of what they called trout. Black-spotted, and in every way closely resembling the trout of Europe, wholly unlike the charr or trout of the Eastern States.

The derivation of the name Dolly Varden trout is given as follows: "In Oregon the red-spotted trout, or charr, is distinguished by the name of bull trout. In California it had, for a long time, no distinctive name. A landlady in some hotel in the neighborhood of the U. S. Fish Hatchery at Baird, on the McCloud River, at the time of the Dolly Varden craze, noticing the gaudy colors of this

charr, proposed to call it the Dolly Varden trout. This name coming to the ears of Professor Baird, then United States Fish Commissioner, pleased his fancy, and he directed me, who then had the classification of the trout in the Smithsonian Institution in hand, to continue for this species the common name of Dolly Varden trout, and so, in the books at least, Dolly Varden trout it is to this day."

There are five species of salmon on the west coast, namely, the quinnat or king, the blue-back or red, the silver, the dog and the humpback. The first averages 23lbs. in weight, and reaches 100lbs. The red fish usually weighs from 5 to 8lbs.; the silver salmon 3 to 8lbs.; the dog salmon averages about 12lbs., and the humpback (the smallest) weighs but from 3 to 6lbs. The king and blue-back salmon run in the spring, the others in the fall. An account of the habits of the fish when in the rivers is given, and the food, spawning and changes in form and color. The great destruction of salmon in the Columbia River and decrease in the fisheries all along the coast are mentioned.

"Of the American trout," says the Doctor, "the one which most closely approaches the European *Salmo fario* is the rainbow trout of California, *Salmo irideus*, as it was named some forty years ago by Dr. W. P. Gibbons, of Alameda." No specimens of this trout have been obtained east of the Cascade Range or of the Sierra Nevada. It ranges in size from six inches in length to six pounds in weight.

"Another California trout is the so-called steel-head, more usually known in California as salmon trout, a fish sufficiently like the salmon trout of Europe, but the name steel-head seems to me preferable, because it is given to no other fish." The name is suggested by the color of its head and hardness of the skull bones; usual weight in Columbia River 12lbs., maximum 25lbs. (We have seen 32lb. fish). The Doctor compares the steel-head and rainbow, and finds few and minor differences. "It is not at all unlikely that the steel-head is simply a rainbow trout which has descended into the sea and which has grown larger and coarser, and acquired somewhat different form and habits on account of its food and its surroundings."

Next is the cut-throat trout, *Salmo mykiss*. "It is the most widely-distributed of all our (west coast) trout, being found throughout Alaska, Kamtschatka, in all the streams of Washington and Oregon, in the northwestern part of California; throughout the rivers of the great basin of Utah, in all the streams on both sides of the Rocky Mountains until we come to the desert lands, where the washes of sand make the streams uninhabitable to any trout, and thence extending its range southward in the mountains as far as the springs in Chihuahua, the southernmost point reached by any trout in any country." The name cut-throat alludes to the crimson blotch around the throat. [A better name is red throat]. It reaches a weight of 25lbs. or more. The largest known specimens occurring in Lake Tahoe and in the salt water of Puget Sound.

The next and last fish is the Dolly Varden. "The finest of the trout-like fishes on the Pacific coast, and scarcely different from the Eastern brook trout, the slight difference being, on the whole, to his advantage. It is rather plumper in body than the brook trout of the coast. The red spots are on the back as well as on the sides, and the back and upper fins do not show the dark green marblings which are characteristic of *Salvelinus fontinalis*. In food, in body and in gaminess, the Dolly Varden, or *Salvelinus malma* (this, too, a Russian name, first given it by Steller), is not inferior to its Eastern cousin.

"Everywhere on the Pacific coast, in the clear streams of the Cascade and Sierra Nevadas, and even the Coast Range of mountains, some species of trout abounds. This region should be the paradise of anglers."

A TRIP TO SABATTIS.

A MONUMENT situated in the town of Wales, Me., will perpetuate the name of the old Indian, Sabattis, in the memory of Maine during all time to come. Near Sabbatis Pond stands this monument—Sabattis Mountain. It commemorates the name of the once famous and widely-known chief. It is a beautiful structure and decorated in nature's loveliest fashion. For all we know, like the Pyramids, it may be full of chambers, where repose unknown treasures or the valueless remains of ancient dead. We do know that an entrance to the pyramid of Sabattis exists, but no one has as yet had courage to explore this ancient structure, built long before the name Sabattis was given it. It was our purpose to explore the cave of Sabattis Mountain and to get some shooting and fishing in its vicinity, when over a decade ago the writer visited the locality.

Sabattis Pond years ago afforded unsurpassed fishing and hunting to the sportsmen of the neighboring city and towns. Pickerel were abundant and large; ducks, snipe and yellowlegs were plentiful. The lake was near the low-tide of its glory when we sought to wage warfare on nature's children there. Only the last remnants of the tribes that inhabited the waters or the neighboring forest remained. As the Indians had disappeared slowly from the banks long ago, leaving only the name of a chief to indicate their former abode there, so the pickerel were gradually being exterminated in their turn, as had the trout before them. Enough could be caught to induce the Sunday sportsman to come from Lewiston, and enough snipe and plover, with an occasional duck, sufficed to excite the huntsman's ardor, and in the woods of the mountains gray squirrels still abounded. The pond, it is said, was once stocked with black bass, but they have given no sign of existence there.

We found our guide, old friend of our boyhood, who, provided with a lantern and geological hammer, conducted us to the entrance of the dread abode. The space was too low to allow a person to enter otherwise than by wriggling flat on his stomach. We wormed our way up a slight incline into quite a spacious gallery. How far it extended we did not learn. The somber walls and roof glittered with precious goms, which at the touch of human hands turned to drops of water. We found no treasures near the entrance, so proceeding a short distance further we tried to peer through Stygian darkness ahead. My guide was positive he could see two green eyes staring at him and insisted upon a departure, which soon after we concluded to make, as our light flickered and went out. We scratched a match, which, too, was immediately extinguished. We then threw some stones

*Salmon and Trout of the Pacific Coast. By Dr. David Starr Jordan, President of the Leland Stanford, Junior University, Sacramento, State Office. A. J. Jonston, Supt. State Printing, 1892.