THE RED YOUTH AT SCHOOL.

Indian Education and Some Characteristics of Indian Students.

HAMPTON, Va., June 7.—There were in the United States, according to the last census, 249,273 Indians, living on 213,000 square miles of reservations. New York State has an Indian population of 5,204. It is said that there are not a dozen of full-blooded members of the Narragansett tribe of the Montauk country in existence, while the number of Shinnecocks is growing less every year. I have seen them in their reservation in the Shinnecock Hills and about the lower part of Long Island, and have been impressed by their apparent indifference to civilization and its methods, which hemmed them in on every side. I have also become convinced of the hopelessness of their redemption from savagery or ultimate extinction. The few mixed bloods of the Island, concerning whom I wrote an article for THE SUN in the summer of 1893, are, in the main, the only ones who appear to be in some measure free from this impending extinction, and they are mostly segregated from the Indian masses and do not always attend the annual powwows or councils to preserve their tribal identity and rights.

Left to themselves and their savage pursuits, there seemed to be no hope for the Indians. They adopted only the vices of civilization, which, added to the vices of savage life, increased their degradation tenfold and made their degeneration only the more rapid. The pity of it was recognized by all generous and humane people of the country. But up to twenty years ago nothing systematic was done to educate and Christianize the Indians. The work was left to the self-sacrificing labors of a few Catholic and Protestant missionaries. They were given over largely as a prey to the Indian agents and traders, bent upon enriching themselves at as small an outlay and as rapidly as possible.

A change of methods was adopted in 1875 as an experiment, and it has been watched with interest by all thoughtful people. The results are gratifying from every point of view. The cost of Indian maintenance has been greatly decreased, and the infrequency of Indian wars has led to the dismissal from the army of most of the Indian scouts due to the decrease of the garrison force at points where a few years ago eternal vigilance was the costly price of peace.

To Capt. R. H. Pratt of the regular army and to the late Gen. S. C. Armstrong are due the inauguration of the plan of systematically educating Indian boys and girls in all the elements necessary to a higher and nobler manhood. The idea appears to have grown upon Capt. Pratt while in charge of a body of seventy-five Indian chiefs and their boldest followers, in Fort Marion, at St. Augustine, Fla., during a period of three years. These Indians were made up of representatives of Kiowas, Comanches, Cheyennes, and Arapahoes of the Indian Territory, captured in the war of 1875. Capt. Pratt had sided in their pursuit and capture, and had had charge of them at Fort Sill before they were transferred to Fort Marion. He began at the latter fort the important task of preparing the Indian's mind and body for the reception of higher ideals of education and living. The task was self-imposed. The Indians were not sent to Fort Marion for that purpose, nor was Capt. Pratt deputed to that service. At the end of the three years the prison doors were opened. One of the most instructive object lessons in existence is the picture of these Indians when they entered and when they emerged from Fort Marion. They do not look like the same beings. They are not the same. They had been transformed, in part at least. Miss H. W. Ludlow, who is an authority on Indian work here, in describing these pictures, says:

> Looking at these pictures, one is disposed to agree with the old warriors that the old fort was their tent. These half naked, crouching forms, with blankets dropping from their gauntness; with savage locks streaming unshorn and untouched; with barbaric ornaments of brass rings in their ears and on their arms; with fierce and sullen faces—these are not even the bodies that should be used should recreate the object and give them back to pleasant life—straight, erect, manly, with smiling, earnest faces and hopeful, unlooking eyes—as here they stand on their resurrection day, with their prison graves behind them. It is an object lesson for the world.

Twenty-two of the younger of these Indians remained in the East, fifteen of them being placed in the Hampton Institute, Capt. Pratt being detailed by the Government to look after the students in April, 1878. In November, 1878, the first party of students from the West arrived here from Dakota. One of the brightest of them was Sahanandaka, an Arickaree. So successful did the experiment prove under Gen. Armstrong that the Interior Department determined to turn the old cavalry barracks at Carlisle, Pa., into an Indian training school on a large scale. This was done in October, 1879, and Capt. Pratt was placed in charge of the work, and has now over 800 boys and girls under his care.

The Hampton work was not abandoned because of the institution of the Carlisle School. The Government appropriates $20,000 annually for the education of 120 Indian boys and girls, and a few more are educated by private munificence. During the past year there were 138 here, 46 of whom were girls. These students are under the control of persons long familiar with the work of Indian education on the reservations and in the schoolroom. Miss Josephine Richards has charge of the department. The boys are housed in a solid brick structure called the wigwam, the girls in a roomy brick building called the Winona Lodge. The buildings are widely separated, and there is no association of the sexes, except under the closest watchfulness.

I have spent much time during the past ten days studying the interesting Indian students here. I have found it a very fascinating occupation. Our preconceptions are often rudely shocked by facts, sometimes pleasantly, sometimes disagreeably. The Indian, as I have seen him in the Indian Territory, hanging on the skirts of civilization, barbaric, picturesque, stolid and sullen, and in the Shinnecock Hills and about the Hamptons, on Long Island, is a very different person from the Indian students here, male and female. There are resemblances of color and feature and character, of course, but all these are modified in a marked degree by education and civilizing influences.

The Indian here is a social being. He prefers the society of his own, it is true, but he mingles freely with the Afro-American students and takes part in all their military drill, wearing the common uniform of dark blue, with cap to match, at all times, and while having his own dormitories, eats in the common dining room with the other 800 students.

I have been surprised at the heads of the male students. The accepted idea is that the Indian must have a flat head and a receding forehead, which always indicate a low mentality and brutal instincts. These attach to him in the average conception as much as the army blanket and paint and feathers. A large percentage of the Indian students here have well-rounded heads and well-developed foreheads. They are the pick of reservations, where they have enjoyed some advantages before coming East. The longer they remain here, however, the more marked becomes the differentiation in these respects. It has been noted also in the case of native African students that mental development and cranial enlargement go together. The Indian does not take kindly to language, and it takes him twice as long to master English as it does a native African student. But he makes a fairly good and industrious student, with fair aptitude for mathematics. These students are generally patient under discipline, but they sometimes get ugly and fractious, when the offender is promptly hustled off to the guardhouse and a broad and water diet. There is no soothing effect on the Indian's nerve. The guardhouse is reserved entirely for the Indians, as they cannot well be suspended and sent home. They are proud and haughty and sullen under the guardhouse indignity.

The Indian is a natural athlete. He takes to baseball as naturally as a New Yorker takes to boating, swimming, and jumping. The Indian baseball nine is one of the best in this vicinity. It is said that "play ball" is the most pleasant sound he hears on the Institute grounds. He that as it may, he plays ball with a snap and ginger that seem to entail nothing else. He has, in the main, a splendid physique, although his height and weight are not greater than with other races. Indeed, on parade there is no great difference observable in the height and weight of Indian and Afro-American students. Dr. Waldron, the resident physician, says on this point: "The muscular strength of the Indian is far in excess of that of his vital organs, as the death of many a boy who has won in a race or wrestling match, and then paid the penalty with his blood, in a fatal hemorrhage, could testify."

It is generally admitted that the Indians are very much subject to pulmonary complaints. They are strong muscularly, but weak constitutionally. There is less sickness among them now than formerly, because more care is taken in selecting them for student life in the reservations in the West, where they undergo a thorough physical examination. In explanation of this fact of constitutional weakness, Dr. Waldron says: "The well-attested fact that consumption is the scourge of the Indian in the climate of Dakota, where pulmonary diseases among the whites are almost unknown, points conclusively to the fact that there has been, and is, lurking in the peculiar condition of the Indian life which engenders the disease. Those who best know what the home life of the Indian is do not think that it is school or civilization, Western or Eastern, that kills him, but rather the cumulative effect of the vice and ignorance of generations." It is believed here that the mixed blooded Indian is not only hardier than his full-blooded brother, but than the mixed-blooded African, who in turn is less hardy than the full-blooded African. I think this is an error. I believe that the mixed blooded of both races, and of any race, are physically hardier than the pure blooded. If it is true of the white and red races, why should it not be true of the black and yellow races?

Another striking development of the Indians here are their fondness for music. Most of them read music, and they have their glee clubs. Half the members of the brass band, a very fine one at that, are Indians. The proud drum major is an Indian half breed, and when the band turns out he makes the air tired with the lackadaisical and scientific twirlings of his long baton. An unusual thing occurred a few evenings ago when an Apache quartet, walking arm in arm from the chapel to the wigwam, chanted an anthem to the moon. Such a demonstration is not common.

The girls are much more social than the boys, and chum more generally with the Afro-American girls. They are neat and precise housekeepers. Some of them are really beautiful. The Apache girls are generally very short and fat, with pretty round faces. The Cherokee women are taller and more graceful.

The record of Hampton graduates who have returned to the reservations is of a most hopeful character. Miss Cora M. Folsom, who makes frequent visits to the homes of the graduates, says: "Some of these homes where I was entertained were quite superior in the accommodations of civilized life. In one place I was hospitably entertained by a young matron whose whole education and training had been at Hampton. Her husband, an excellent young Indian, had a good salary, and their house, though small, was well furnished, neat, and orderly. A bright, well-kept young baby keeping things lively in it. As I sat with these young Indians, so refined in manner and address, around their perfectly arranged table, it was hard to realize that they were of the same race as those with whom but a few days before I had been meeting 'Indian fashion,' on the ground in an Indian camp, disposing of a bill of fare which would not mean much to civilized ears."

The success which is attending the systematic training of the head and hand of the Indians here at Carlisle Santee, Nebraska, and at other points, will induce a very general regret that this work was so long neglected. Pursued in this way, the wealth spent on Indian wars would have redeemed from savagery and reclaimed to Christianity and to peaceful pursuits the entire Indian population. T. THOMAS FORTUNE.

THE MOHAMMEDAN SACRIFICE.

Ceremony Performed by Nasrulla Khan in London on June 4.

The Afghan Prince celebrated the great Moslem feast of sacrifice, known as the Bairam, in London on the morning of Tuesday last. Notwithstanding the statement of the historian, Gibbon, that Islam is religion without sacrifice, this religious ceremony in which the Afghan Prince took part on Tuesday is celebrated in all parts of the world. It is the culminating act of the Meccan pilgrimage, and the institution is religiously observed by every devout Moslem.

It commemorates, so it is said, the willingness of Abraham to offer up his son Ishmael (not Isaac, as stated in the Bible).

The story as told by Moslem writers is as follows: When Abraham, the friend of God, founded the city of Mecca, the Almighty commanded him to prepare a feast. Upon Abraham requesting to know what the Lord would have served on the occasion, God replied: "Offer up thy son Ishmael."

Abraham then took Ishmael and placing him on his back with his head toward the Black Stone, proceeded to slay him. Ishmael was a willing sacrifice, but Abraham's hand trembled, and after making several ineffectual

A MOSLEM PREACHER AT THE FEAST.

strokes on the throat of his son, he threw the knife down upon the ground.

Ishmael said: "O father, you cannot sacrifice me because your eyes are uncovered, and your pity and compassion for me unnerve you. Blindfold your eyes with the end of your turban, and then sacrifice."

Abraham acted upon his son's suggestion. He again took the knife, and when blindfolded drew it across his son's neck, as he supposed, and the blood gushed forth as the aged patriarch cried, "God is great."

But in the mean time the angel Gabriel had substituted a broad-tailed sheep for the youth Ishmael, and when Abraham unfolded his eyes the sheep lay slain at his feet, and his son Ishmael was standing behind him.

A service in the mosque always precedes the sacrifice. Outside most of the large Mohammedan cities there is a place erected called the edgah for the special service, where a vast congregation assembles, and, led by the Imam, or priest, they make what are known as two prostrations in prayer. The prayers ended, a preacher ascends the pulpit and delivers a khutbah, or sermon.

This sermon is always in Arabic, and runs something in this strain:

"In the name of the Compassionate and Merciful God.

"God is great. He is worthy of all praise. He is without a partner and without an equal. He maketh the rich generous and provideth sacrifice for the wise.

"Listen, O ye people. There is no God but God. This testimony is as bright as the morning of this glorious festival. Know ye, that to rejoice on this festival is the sign of all that is pure and good. This is a great feast. They who observe it will rise glorious in the day of resurrection. It is not a day for foolish acts. It is no time for amusements, negligence, and idleness. It is a day on which to utter the praises of the Almighty God. It is a high festival, instituted by our father Abraham, upon whom be peace. O ye believers, know ye that every free man shall offer sacrifice this day. A goat, a ram, or a cow is offered for every seven persons. The victim must be without blemish. Not one-eyed, not lame, not sick, nor very thin.

"If you sacrifice a good fat animal it will serve you well. His blood will carry you across the bridge Seerat at the day of judgment, for thus saith the Prophet (on whom be mercy and peace): 'Sacrifice the victim with your own hand, even as Abraham, the friend of God, did.' O ye believers, if ye sacrifice on this day, God will pardon your sins for fifty years past and for fifty years to come.

"May God pardon us all, so that we may not fear the day of resurrection nor have sorrow on the day of judgment.

"O ye believers, may God give you a blessing by the grace of the noble Koran, and may you all seek pardon. God is the Forgiver, the Merciful, the Eternal, the King, the Compassionate, the Clemency of God, the Protector, aid Islam. Strengthen the pillars. O God, frustrate the designs of the infidels, invert their banners, ruin their habitations, and give their wealth as booty to the Moslems. O God, aid thy servant, his highness the Ameer of Afghanistan, Abdur Rahman, the son of Afzal Khan, the son of Dost Mohammed Khan. Prosper his reign. Assist his armies. Help the armies of Islam throughout the world.

"O ye believers, the sermon is ended. May the mercy and peace of God rest on Mohammed and upon his descendants. Amen."

While in Turkey and Egypt the festival sermon is preached from handsome pulpits, such structures are considered to be contrary to the simple spirit of the Prophet.

The pulpit in the mosque at Woking is a primitive structure, such as is found in the mosques of India, and are said to have been built after the model sanctioned by the Prophet himself. It consists of three steps, and is a movable structure. The Prophet used to preach from the uppermost step. Abu Bakar, the first caliph, took the second, and Omar, with commendable humility, descended to the third. Osman, with characteristic meekness, would have gone lower still, but as this was impossible, fixed upon the middle step, and since then this has been the orthodox position for the Moslem preacher.

The service in the mosque at Woking being over, the Afghan Prince would return home to Dorchester House, and there, in the midst of the motley group of attendants, he would slay the sacrifice. Placing the head of the sheep toward Mecca, he would take a knife in his hand as two of his servants held the animal, and then, according to the injunctions of Moslem law, draw the knife across the throat, cutting the windpipe, the carotid arteries, and the gullet, and would cry with a loud voice, "In the name of the great God. Verily, my prayers, my sacrifice, my life, my death belong to God, the Lord of the worlds. I perform the act which I have been commanded to do, for I am among those who are resigned to God's will."

THOMAS P. HUGHES.

Time and Step.

"Sometimes," said an old soldier, "one sees the Captain of a company marching proudly along, in time with the music but out of step; the company right, the Captain wrong. Distressing enough it is, but there I have seen a musician marching out of step to the music of his own band, and there is now and then a soldier who never really learns to keep step. The familiar order is: 'Left, left, left, left; the left foot down at the heavy tap of the drum.'"

GASTRONOMIC NOTES.

The famous inns which, formerly, were so numerous on the more travelled highways of England, the Continent, and the United States, and which, one by one, were closed as railways supplanted the old methods of travel, are now, through the growing use of bicycles, again coming into favor. It is probable, however, that the original characteristics of these inns will undergo modifications which, while more in harmony with the spirit of the age, will cause them to lose the quaint simplicity that distinguished them in the past. It would be a great gain if the always excellent, if modest, culinary merits for which they were noted could be retained. In former days each of these inns had a reputation for the preparation of special dishes, so that the traveller on a long journey was assured of a variety of agreeable gastronomic experiences to which the modern tourist is an entire stranger. Before the completion of the Chesapeake and Ohio Railroad to the White Sulphur Springs persons visiting that resort were transferred to stages at the terminus of the railroad at Jackson's River. To these travellers the great point of interest was the supper at a half-way station called Callahan's. At that inn only fried chickens, ham, and potatoes were served. Their superlative merit, that never varied, was the delight of all travellers.

The quaint architectural features of the old roadside inns have probably, in most instances, departed forever. Those that have survived and have become summer resorts have been modernized by incongruous additions. Long Island was once famous for its old and rambling taverns. Only one is now in existence, that at Canoe Place. Even this has been injured by an annex, which detracts from its otherwise architecturally perfect embodiment of a roadside inn.

Just as the use of gas for culinary purposes is a great advance on coal or wood, electricity is superior to gas. Devices for its use in all the processes of cookery have now been perfected. Nelson W. Perry, E. M., in *Cassier's Magazine*, describes the systems by which it is applied. The most direct and simple way is to imbed a wire either in a flat coil or in zigzag or corrugated lines in a thin sheet of cement or enamel, which may be strengthened by a sheet of cast iron or steel. Such a plate, when the proper current is turned on, becomes quickly heated, and is ready for use. By lining a box with or enclosing in a space a number of such plates, an oven is furnished, and roasts may be cooked or bread baked in it both quickly and cheaply. On a table equipped with a switchboard connected with a chafing dish, stew pan, tea kettle, coffee pot, broilers, and griddles, and all the other paraphernalia of a first-class kitchen, all the culinary processes are successfully accomplished. The electrical baking oven is probably the most interesting illustration of cooking by electricity. The oven is simply a wooden box about two and a half feet long by a foot and a half wide. On two sides at one end it has doors in which are large glass windows through which four incandescent lights enable the cook to watch the rib of roasting beef or loaf of bread baking. Except where the windows are, the inside of the box is lined with asbestos. The top and bottom are composed of heating plates, and there are devices by which additional plates may be inserted, so as to utilize the capacity of meat or bread to be baked. In order to bring the value of cooking by electricity to the attention of amateurs, electrical supply firms of London lend electrical cooking stoves on approval, and furnish the necessary electricity at cost, the latter being, so far, on account of its cost, only those who can afford the luxuries of life can avail themselves of the use of electricity in cooking. To fry four or five cutlets, including the time required for heating the pan, there will be needed the equivalent of five sixteen-candle power lamps for twelve minutes. For baking in the electric oven the equivalent of eighteen lamps will heat it from 53° to 120° Fahrenheit in five minutes, to 256° in ten minutes, to 356° in fifteen minutes, and to 437° in twenty minutes.

The sale of hog products in New York is conducted under very different conditions from those in vogue in Paris. With us the dealer has nothing to do with cooking the material which he sells. In Paris, on the contrary, the pork butcher, who rarely purchases more than a single carcass at a time, while he may dispose of certain uncooked parts, transforms the larger portion into a very great variety of most appetizing delicacies in readiness for immediate consumption. No shops in Paris are more attractive, none more scrupulously clean, than those of the pork butchers. They are usually owned by a man and his wife. The first has absolute control of the kitchen, which he conducts without any assistance; the second acts as saleswoman and business manager. A successful establishment earns within a few years an ample competence for its proprietors, who then retire to the provinces and assume the rôle of *rentiers*. The decorations of the windows of the Paris pork butcher shops are one of the sights of the town. Not only do they include all the most appetizing forms of cooked hog meat, but also tempting truffled turkeys, scarlet-coated ox tongues, colored pots filled with meats or pattées, and bottles brilliant with the hues of their succulent contents; the whole effectively embellished with judiciously disposed frills or shavings of colored paper. For one franc, or about 20 cents, one may purchase at these shops an assorted luncheon consisting of partridges, sausages, galantines, and ham. As these establishments are open throughout the entire twenty-four hours, they are much patronized by night workers, such as the compositors employed on the Paris morning newspapers. Every morning at about 3 o'clock, after the journals have gone to press, these men may be seen seated on the edge of the sidewalk of the Rue Montemartre making a meal off the cheap but appetizing food purchased at the pork shop, supplemented by a bottle of vin ordinaire. The first bakers' cart that hies to come hot from bakers' ovens. One may imagine the effect upon the average policeman of New York if he detected newspaper compositors making a meal and drinking a bottle of wine while seated on the edge of the sidewalk. It is certain that the great popularity enjoyed by the pork butchers in Paris is due to the scrupulous cleanliness of their kitchens and the prompt action of the officials in seizing all diseased meat. It is rare that any tainted flesh is found at the pork shops, but to provide against possible loss from this cause, they have established a guild, which indemnifies its members in case of seizure.

Lombroso, in his book, "The Female Offender," under the head of "Occasional Criminals," calls attention to the very great dishonesty of the female domestics of Paris. Balzac, in writing of his time, calls them with few exceptions "shameless thieves whom we pay." He says that they plant their toll houses between the dinner table and the market places, and the municipality of Paris is not so sucessful as they in exacting its dues. Fifty per cent., even at that time, was levied by these women on the price of eatables, and presents were demanded from the tradespeople as well. The richest shopkeepers trembled before their tyranny and invariably endeavored to conciliate them. Anybody offering protest was met with insolence and abuse and promptly calumniated. Mme. Grandpré asserts that the evil is even now much greater in Paris than in Balzac's time. She knows of maid servants who have so enriched themselves by peculation as to become persons of consequence in their neighborhood, and who, worse still, instruct in their dishonest practice young women freshly arrived from the provinces. We are fortunate in this respect, that whatever may be the shortcomings of the female domestics employed in the United States, dishonesty, with comparatively few exceptions, is none of them. Lombroso, in writing upon this subject, makes the astonishing statement, given on the authority of a high French police official, that whereas, owing to great watchfulness, only an average of five thefts daily are committed in the thirty principal shops of Paris by women, in the provinces of France thefts from shops by women amount to 100,000.

Dutch cookery is not of a very high order of excellence, although the modifications which it has undergone in this country since the coming of the first settlers from Holland have won for it, with us, no small amount of repute. In Holland, where culinary traditions are held sacred, the cookery of to-day is in no way an improvement on that of three centuries ago. For breakfast tea is used instead of coffee. This meal is a very simple one, consisting of rolls and butter, and eggs merely dipped in boiling water. For luncheon, underdone beefsteak swimming in melted butter and raw herrings served on cracked ice are the favorite dishes. In addition, fresh fruit is abundantly eaten; for drinks there is a profusion of wines and liquors. Dinner is the principal meal of the day. This is served usually at 5 o'clock. It opens with thick soups, accompanied by highly spiced balls of forcemeat. The meats which follow are cooked to rags and cut in very thin slices. The vegetables are mainly good, but injured in their preparation by a lavish use of sugar and cinnamon. Of salads those of lobster and crab with a mayonnaise sauce are the favorites. The desserts are good, as are the liqueurs, of which the women copiously imbibe.

Sir John Lubbock has recently made some studies of the alimentary habits of spiders. Selected specimens were weighed before and after a full meal, with the result of learning that if a man was to absorb the quantity of food proportionate to his weight consumed by a spider he would devour two whole oxen, thirteen sheep, a dozen hogs, and four barrels of fish.

THE LAKE TROUT.

Fished for Differently in Different Waters, But Why?

The lake trout of Lake Keuka and Seneca Lake, in western New York, of Lake George and of Raquette Lake and other Adirondack lakes, are identically the same fish, yet anglers on Lake Keuka have one way of fishing for them; they cannot be caught with hook and line at all in Seneca Lake; Lake George fishermen have their own method of taking them, and with Adirondack lake anglers a style of fishing peculiar to those waters is popular. If a sportsman should attempt to use a light rod and line, and to troll near the surface for trout in Lake Keuka, he would be looked upon as a fit subject for a lunacy commission. He would be held in similar estimation if he went on Lake George or Raquette Lake with three hundred feet of line as big round as a lead pencil, with a heavy slug of lead and a branch line fastened to it at intervals of fifty feet or so, and a silver troll as big as a tablespoon attached to each line, and started in to troll for trout; and if he should appear on either Lake George or Lake Keuka, bait the lake at various points with bits of dead fish and the next day anchor his boat at one of such points, bait a hook as big as a codfish hook with a similar piece of dead fish, and begin angling with it for trout, it is likely he would be run out of the region as a dangerous crank. Yet that is a popular and successful, but hardly a sportsmanlike manner of fishing for lake trout in the Adirondacks. It is called "buoying" for trout. It is entirely unknown on Lake Keuka or Lake George.

The heavy-leaded line, with branches, and big single-hook silver spoon trolls are unknown on Lake George or the Adirondack lakes. Lake Keuka knows no other tackle for lake trout, and the fishermen invariably drag it in from 75 to 100 feet of water, while their brethren on Lake George or Raquette Lake are handling light rods and fine lines, with either flies or light gang trolls, and fishing near the surface. On neither Lake Keuka, Lake George, nor Raquette Lake would fishermen for lake trout think of using live bait. On Keuka they put a small fish called the sawbelly on their trolls to add to its attractiveness. The sawbelly is caught at night by drawing seines made of mosquito netting. This fish has iridescent scales, like mother-of-pearl. It grows to be four inches long, and dies the instant it leaves the water. On Lake George the trout fishermen twist on their gangs a silver-sided fish they call the whitefish. The only way these can be caught is by setting gill nets for them in fifty feet of water. They are from six to eight inches long, and are used dead. On Raquette Lake a sucker they catch with dip nets is used as a lure. But on the eighth lake of the Fulton chain, only four miles from Raquette Lake, a live minnow is used as a troll for lake trout, and successfully. No gang of hooks is thought necessary to hook securely this great game fish. Only a single small hook, which is run through the minnow just beneath the back fin, is used. The minnow is allowed to swim as it pleases and do its own trolling.

Buoying for lake trout is the favorite method of killing this fish on many of the Adirondack lakes, especially with local fishermen. This is practised early in the season, chiefly, before the trout seek the very deep water. In preparing to buoy for trout the fisherman first sounds for water between twenty or thirty feet deep and where the bottom is stony. The spot selected, he anchors a buoy to mark it. The buoy may be a piece of wood, the limb of a tree, a bush, or anything that will serve as a marker. He then cuts a few suckers into small pieces and scatters them about the buoy. They sink to the bottom. This is called baiting the buoy, and is sometimes repeated two or three days in succession before any fishing is done. When the fisherman is ready to fish the buoy, he ties his boat to it, the anchor serving to hold it to the spot. All the tackle necessary is a stout hand line, to which is tied a very large hook. This is baited with a piece of sucker. The baiting of the buoy has caused trout to collect about the spot to feed on the pieces of fish, and they are pretty sure to be ready for more, and eagerly seize the bits that come down to them on the hooks. The hook is taken down by a heavy sinker and is kept in agitation a foot or so above the bottom.

A peculiarity about buoy fishing is the gentleness with which the trout signal up the line that they are biting, the bite of a five, six, eight, or even ten pound trout seeming no stronger than the nibble of some small fish. The instant that nibble is felt, though, the fisherman must strike hard by an upward jerk of his hand. A half second's delay may lose him his fish. It is by no means an unskilful thing to do to hook a trout in fishing such as this. If the fish is hooked, the chances are that the hook is clear through his upper jaw, and the landing of him is tolerably sure. He has to be pulled up quick, but steadily, and if trout are biting freely the sport is enjoyable and exciting.

It would seem to be reasonable that if lake trout may be taken with light tackle and trolling only a little distance below the surface in Lake George and the Adirondack lakes, they might be taken the same way in Lake Keuka, and that if live bait, without a sinker, is a killing lure for this splendid fish in Eighth Lake of the Fulton chain, it should be the same in the other lakes. A trial of some other than the clumsy Lake Keuka method of lake trout fishing in Seneca Lake, where those fish are abundant—as gill-netting proves—but where one has not been taken with hook and line for years, might have pleasant results.

MAYBE IT'S FISH CHOLERA.

An Unknown Disease Fast Killing the Fish in Connecticut Ponds and Lakes.

HARTFORD, June 8. Fish in many ponds and lakes in Connecticut are dying rapidly from an unknown disease. Three places that show the worst ravages are Pamecha Pond in Middletown, the beautiful Bantam Lake, Litchfield, and Shuttle Meadow Lake, New Britain.

Unusual movements on the part of fish in these ponds were noticed two weeks ago. They swarmed together and floundered about in an anxious fashion. In a few days it was noticed they were changing color. Their fins grew yellowish and white, their scales dried and fell off, and in other ways they showed unmistakable signs of suffering from some distemper or scourge. Then an occasional fish was seen floating on the water and here and there a dead fish was found on the shore. Last week the mortality assumed alarming proportions. Bodies of fish line the shores of Bantam Lake and Pamecha Pond by the bushel basketful, and from Shuttle Meadow Lake, the source of New Britain's water supply, dead fish have been taken away by the cartload.

It was thought at first that the mortality among the fish might be accounted for on the supposition that some one had thrown poison such as lime in the water, but a thorough investigation in at least two cases disproved this theory. An analysis showed no signs of poisonous matter in the water, and still the fish were dying by the hundreds. Then a unique theory was broached by Joel Hammond, the Izaak Walton of Litchfield county.

"It's plain enough, to see that the fish are dying of fish cholera," he said. "What! Never heard of fish cholera? Well, I ain't surprised, for the cholera hain't ravaged the fish ponds of this State for a generation or more. It was just before the war, if my memory serves me right, the last visitation of this plague occurred, in the latter part of the fifties the ponds and lakes had to be restocked from the rivers, and fish were imported in large quantities. Why, at that time there wasn't a live fish left in half the ponds, and towns had to appropriate money for restockin' of the dead fish. It is going on just the same way now. You know the shores of Bantam Lake are covered with dead fish. Well, I can tell you it's the same with all the big ponds in this county.

"I picked up the biggest perch on the shore of Bantam Lake yesterday that I ever see. I didn't weight it, for it was dead as a smelt, but I tell you you might fish a month in the Sound and not catch a bluefish that would touch him. Black bass? Well, I've tucked away many a big one in my day, and didn't spear 'em when they were spawnin' either; but what would you say to a ten-pounder? Wouldn't be likely to fetch him in on a hook and line, even with your trolley apparatus, would you? Well, I picked one up at Twin Lakes the other day, floatin' belly up near the shore. Big pike and pickerel and an occasional trout, with his starry spots all run into a yeller streak by the cholera and dace, and the shovel-nosed sucker—they're all dying, and the Lord knows if there'll be any fishin' left comes fall."

The situation is a most serious one, and there has been talk of a legislative inquiry. The Fish Commission has charge of all matters connected with fresh-water fishing in the State, and some action is looked for from it. At the present rate of mortality the finny population of the lakes and ponds will be wiped out of existence before the end of summer, and fishermen are anxiously casting around for some means to check the disease. Science has been invoked in the persons of professors from both Wesleyan University and the State experiment station. They have not yet made a report. Among the dead fish cast up in the lakes referred to are some of the largest perch and pickerel ever taken from the waters of the State. In Shuttle Meadow Lake the question is a serious one from a sanitary point of view. The lake covers a large area and is very deep. It is the sole source of water supply for the city of New Britain. Men have been engaged to cart off the dead fish as fast as they appear, but the question arises, Will the water carry seeds of disease to human beings? Whatever the disease is, it seems certain that the epidemic is in some way communicated from one body of water to another.

NAVAL NEWS AND NOTES.

The New Torpedo Boats—The Battle Ships—Kiel Table Money—Vacant Commands.

WASHINGTON, June 8.—It is a source of satisfaction that the three new torpedo boats provided for at the last session of Congress are to be great advances on any yet undertaken by our navy. They are to exceed the two now under construction at Baltimore by about 10 feet in length, a foot in beam, and six inches in draught, giving over one-third more displacement. The three new boats will be 170 feet long by 17 feet in extreme breadth, and 5½ feet draught with all stores and coal on board.

But the chief gain will be in speed. The trial speed of the Cushing is put at 22½ knots; the expected speed of the Ericsson is 24 knots; the three building by the Columbia Iron Works are to make 24½ knots; while the next three are to achieve a sustained sea speed of 26 knots. That this will be accomplished may be presumed from the character of their engines. These, of the vertical, direct acting, triple-expansion type, are to develop 3,100 horse power. The Cushing's horse power is 1,720; the Ericsson's, 1,850; that of the three Baltimore boats 2,000. It will be seen, therefore, what a long leap ahead is taken with the new boats. When the gunboat Yorktown, 230 feet long, 36 feet in beam, and 14 in mean draught, and of 1,710 tons displacement, developed 3,392 horse power, it was considered a creditable performance. In fact, she was only required to show 3,000, or less than is now calculated for one of these little craft, being little more than one-tenth her displacement.

Of course even our new torpedo boats are not remarkable either in speed or horse power. They are far surpassed in both by some of the new British torpedo boat destroyers, with their speeds exceeding ours by several knots. Still, these are considerably larger craft, and are recognized as being different enough from former torpedo boats to have a distinctive name. They also cost more than our boats, the limits fixed by Congress for our new boats being $175,000. Like our other torpedo boats, these new ones will carry each three torpedo tubes. They will also carry four 1-pounder rifles, the number provided on the other torpedo boats being three each. The tubes will be mounted on the deck, so as to give an all-around fire, and to be used in all conditions of the sea. The size of the boats will allow roomier quarters than on any of their predecessors, in spite of the extra amount of space taken up by the machinery and coal bunkers.

As to the two new battle ships, it is now thought that they will displace about 11,500 tons each, thus being the heaviest vessels in our navy. The displacement of the Indiana class is 10,288 and that of the Iowa 11,410 tons. The reduction in the number of turrets and the superposing of the turrets for the 8-inch guns upon those for the 13-inch have considerably lessened the armor weights. But even the turrets and guns together represent only a very small fraction of the total weight, the armored hull and the motive machinery being responsible for the greater part.

The trial of the two small torpedo boats of the Texas will be followed by that of the similar boats of the Maine. The programme includes progressive speed, measured mile, full power, turning and shoal water trials. The boat of the Texas, at Norfolk, weighs 10,992 pounds, and carries three-quarters of a ton of fuel. The Maine's boats will be tried probably in Long Island Sound, as the Maine is stationed off there.

The allowance of table money to Admiral Kirkland's fleet at Kiel is not excessive, but very welcome. It is $3,000 in all, of which sum the Admiral gets $1,000, as the cost of entertaining will largely fall on him. It may be remembered that Admiral Erben received $3,000 as table money when the Chicago went to Europe, while Admiral Gherardi during the international naval review of 1893 had no less than $10,000 for similar purposes. It is pointed out, by the way, that the problem of civilian visitors, except our diplomatic representatives, is only "during the official functions." At other times civilians can visit our vessels, and there will be no lack of them.

A straw showing how the wind blows as to the North Atlantic station was found in Admiral Walker's departure on a long tour of inspection of Pacific coast lighthouses, beginning far up on the Alaska seaboard. That implies months of absence from the Atlantic shore, and as his chance has been considered all along the chief one of Admiral Ramsay, the Atlantic station command left vacant by Admiral Meade, it is now deemed more than ever probable that Admiral Ramsay will secure it. As to his successor as Chief of the Bureau of Navigation, Commodores Mathews and Bunce and Captains Evans and Henry are still suggested.

ARMY AND NAVY ORDERS.

Assignments of Naval Academy Graduates—Courts Martial in the Army.

WASHINGTON, June 8.—The following navy orders have been issued:

By direction of the Secretary of the Navy the following naval cadets, who graduate at the Naval Academy on Friday, have been assigned to seagoing war ships: Worth Bagley, J. C. Breckenridge, R. M. Bennett, and S. S. Barnes to the Vermont for temporary duty; J. P. Martin, F. D. Carnels, J. J. Roby, H. Lang, M. J. McCormick, R. Z. Johnston, and P. M. Bannon to the flagship Philadelphia; F. M. Freeman, G. F. Eckhart, N. H. Hall, R. W. Todd, M. M. Stanley, W. O. Monaghan, W. C. Davidson, and F. P. Baldwin to the Olympia; Newton Mansfield, P. R. Merritt, E. H. Dunn, W. G. Groesbeck, E. H. Watson, G. J. Wadham, O. S. Knepper, W. H. Gherardi, and H. V. Butler to the Amphitrite; P. N. Peck to the Cincinnati; C. K. Mallory, J. F. Marshall, J. H. Leamann, and J. E. Chenoweth to the Minneapolis; B. M. Harrison to the Raleigh; C. H. Wolcott, H. C. Vestal, J. B. Sayers, W. R. Cushman, F. H. Poole, and J. H. Wells to the Atlanta. The cadets assigned to the North Atlantic station will report for duty on June 24, and those to the Pacific on June 29.

The following army orders have been issued:

A general court martial is appointed to meet at Fort Logan, Col., for the trial of such persons as may be properly brought before it. Detail for the court: First Lieut. Joseph D. Leitch, Second Lieut. Harrison J. Price, Second Lieut. Robert H. McMaster, First Lieut. Benjamin W. Leavell, Judge.

A general court martial is to meet at Fort Hayard, N. M., for the trial of such persons as may be properly brought before it. Detail for the court from the Twenty-fourth Infantry: Capt. William H. W. James, Capt. John Pitcher, First Lieut. Jacob G. Gambrill, First Lieut. Thomas J. Lewis, First Lieut. Charles E. Layman, Second Lieut. Isaac C. Jenks, Second Lieut. Hunter B. Nelson, Second Lieut. Albert Laws, Second Lieut. William J. Glasgow, Judge Advocate.

Leave of absence for twenty days is granted Col. Dangerfield Parker, Eighteenth Infantry.

First Lieut. John S. Mallory, Second Infantry, is appointed Aide-de-camp, Department of the Columbia.

Leave of absence for twenty days is granted First Lieut. Fielder M. M. Beall, Adjutant 18th Infantry.

Leave of absence for one month is granted Major Clarence E. Bennett, Nineteenth Infantry.

Leave of absence for one month is granted Second Lieut. William H. Wilhelm, Tenth Infantry.

Leave of absence for twenty days is granted First Lieut. David L. Brainard, Second Cavalry.

Leave of absence for seven days is granted First Lieut. John A. Lockwood, Fourth Cavalry.

Leave for four months, to take effect upon the expiration of his present sick leave, is granted Major John M. Hamilton, First Cavalry.

The following named officers of the Corps of Engineers, members of the Board of Visitors to the United States Engineer School, will proceed to Willet's Point, New York, for the purpose of making the semi-annual inspection of the school, and upon the completion of that duty will rejoin their proper stations: Col. Henry M. Robert, Lieut.-Col. George L. Gillespie.

Leave for four months, on surgeon's certificate, is granted Lieut.-Col. Evan Miles, Twentieth Infantry.

Leave for seven days is granted First Lieut. William K. Jones, Sixth Infantry, recruiting officer.

Lieut.-Col. Alexander MacK