HUNTING AND TARGET RIFLES.

Editor Forest and Stream:
I note with pleasure the communication of F. M. Wil issue of Nov. 18, on the subject of hunting rifles. It is refreshing to know that there are men who, although the

hile the same practice on squirrels and turkeys has the opposite spult?

I have often heard advocated (and more especially among the fuzzieloading fraternity) the practice of using greatly reduced larges of powder for squirrel shooting. This I believe to be a solitive disadvantage in any rife, as the reduction of powder will crease the curve and decrease the accuracy of the shooting at known distances. Even in target shooting at known distances swould advocate the maximum charge of powder the guu could a unade to utilize without causing irregular shooting. It has been up ractice during the past four or five years to use 105grs. of yorder in all target matches at 100yds. range. The rife is a breechader, and I use the same charge at 500 or 1,000yds. If I were to aduce the charge of powder I would expect to get corresponding the pollure the charge of powder I would expect to get corresponding the cores, but to string measurement, where the distance of each shot on the center of the target is accurately measured and credited the shooter. The same holds good with the hunting rife. It ill do its best work with its maximum powder charge, regardless distance.

In regard to weight and caliber, I think Mr. W. is on the right

to the shooter. The same holds good with the hunting rifle. It will do its best work with its maximum powder charge, regardless of distance.

In regard o weight and caliber, I think Mr. W. is on the right track, and although his views in regard to the merits of the 32-cal. may be a little extreme, I fully indorse what he says in regard to the weight of an all-around hunting weapon. Like "Nessmuk" and many others, I prefer to go light in my hunting and fishing trips. My shotgau weighs 64/abs. It is a single breechloader, 12-gauge, and handles very nicely. I am satisfied with its execution. My rille weighs a small fraction over 81bs. It is to heavy, but, being 49-cal., if lighter it would kick. The fault is in the caliber. Tais gun shoots 60 grains of powder and a hollow pointed bullet of 23 grains, a little better than a proportion of one to four. It is a single breechloader with barrel 26in. long, and balances well for a gun of its weight. And right here is where the repeaters are lack, in the shooter. The entire gun is too long for its length of barrel. As there may be many readers of FOREST AND STREAM who own long barreled target rifles and would prefer a handy hunting rifle, I will tell them how to make the change. Get an 81h. hack saw and saw off a piece from the muzzle end of the barrel so as to reduce its longth to about 24in. File off square and polish with fine emery paper. Countersink slightly to take off the burr inside the bore. Get the lightest bullet you can find in the market to fit the gun. If such cannot be found and you have a mould, drill a hole in same and insert a plug, so as to make a hollow pointed bullet. If this bullet is too heavy to give the desired proportion of powder and lead, get a mould made. Have a set of Lyman sights, front and back, attachod to your rifle, and you will probably have a better hunting rifle than you could have induced the manufacturers to make for you. My choice of the rifles now on the market would be a Maynard 35-55-170, or a Remington 32-40-120, or a Wincheste

Rorristown, Pa., Nov. 24.

Editor Forest and Stream:

I have read the letter of Dr. F. M. Wilcox, in your issue of the 18th, with a good deal of interest. Not a word have I to say against his theory so far as it goes. But sportsmen, like women, are, in a great many instances, wedded to fashion, and before we can induce our hunters to abandon their magazinc and large-bore weapons the fashion must change. Now before the fashion changes some one must set the fashion, and that some one must be a man or club of good repute. I know every sportsman who has given the question a thought, knows that the game is as surely and certainly doomed as the Indian. All we can do is to ward off as long as possible the day of doom. Time will be when the hunter will not shoot his game. He will soe it, steal up upon it and go away to tell round the camp-fire, not what he killed, but what he saw. I do not say that he will not take a shot at it, but the shot will not be with the rifle but with a camera! Smile if you will at the idea, but when a red deer will be worth a hundred dollars and a buffalo worth a thousand, paradoxical as it may seom, it will not pay to kill them. "Time enough yet to think of that," I hear some one say. Well, perhaps so; but these very people now say: "If our grandfathers had only been a little more careful of our forests, they would not be on the verge of extinction (from an economic point of view) to-day. Now, Mr. Editor, the first gun I ever had was a foot or more longer than the owner, and I have used one ever since. I have hunted white bears and walrus in their own to fleids, and deer in our northern woods, and although mine may be an exceptional case, I never had any use for a repeater. For ice bears a heavy bore is uecossary, tho one I used lately being a Snyder. And to those who go to such out-of-the-way places for sport I say take a whole armory with you if you like. But to the nine hunting near home. I heartily indorse Mr. Wilcox's statements re a small bore for deer—not on the ground that it is more

than any one else. You can help to make the single smallbore breechloader "fashionable."

Editor Forest and Stream:

Cartainly Mr. W. M. Wilcox "fired off" a big gun in your last issue. I can't see the matter in the light he does. He claims a low trajectory to be a benefit to the hunter. This is all right. I agree with him; but is there not such a thing as getting it too low? I believe that by using too much powder the bullet is upset to such an extent that it "files wild," consequently what you gain flat trajectory you lose in accuracy. Take for instance the Remington .32-49-125 riffe, which led in the Forest and Stream beat the others it must be the best, and consequently many gun companies had calls for such a gun using the same carbridge. Among them was the Massachusetts Arms Co., of Chicopee Falls. Now, this company makes a specialty of manufacturing line sporting rifles, and as the calls increased, in order to please their customers they made a set of tools for chambering their guns for this cartridge, and sold quite a number of these rifles. Tho result was that in a few weeks complaints began to come in that those .32-40-125 guns would not shoot. Their only reply was that they knew that before they made them, but had only made them to order to please customers. They also claimed to such complainant that they could furnish him a .32-a2-a1 that would shoot. Now they use to make a gun shoot 35-grs. powder and 18-grs. of lead; and you would be surprised to know how many of these guns are now in the hands of the best marksmen of the day shooting 200, 400 and 600 ds. Many are the times that I have seen the workman who tests their guns put shot after, shot inside a 4in. ring at 2007ds. Now, if Mr. Wilcox will turn to the latest catalogue issued by the Winchester Arms Company, he will find on page 31, the trajectories of soveral of their new model guns, namely, 49-82-200, 45-70-406.

Now, if Mr. Wilcox will turn to the latest catalogue issued by the winchester Arms Company, he will find on page 31, the trajector

you wished to break a bar of pig iron would you use a light sledge or a heavy one? Which will drive a nail the quickest and easiest,

you wished to break a bar of pig fron would you use a light sledge or a heavy one? Which will drive a nail the quickest and casiest, a light hammer or a heavy one?

Now about breechloaders. One of the greatest faults with them is that they are not properly chambered and the cartridges do not fit. I have intely had a little experience in chambering a gun for a 50-70-405 cartridge. I chambered it so that a sample cartridge would fit nicely; but upon the arrival of several boxes I could not find another cartridge that would go in nearer than 1/4 of an inch, and some of these varied so much that while one would fit gift another one would shake. Some of the sells varied 1-10 of an inch in longth. Do you woner the soldlers complain that the Springfield rifle won't shoot? The ammunition should be perfect. It is gonerally acknowledged among riflemen that trajectory is only obtained at the expense of accuracy. When a breechloading rifle will shoot fifty consecutive shots inside a 4th, ring at 200/ds. It is good enough for me. This the Maynard rifle will do and has done and can do again. I have one of these guns and know just what it will do, and my gun is no exception; their guns will all shoot as good as mine or better. Suppose, as Mr. Wilcox says, is should want to stroll out for squirrois or rabbits. I simply take does not occupy more than one minute. Then I am completely rigged. The cost of ammunition is but 25 cents per 100 shots. Then, again, if I want practice for a coming match! put on the 22 barrel and shoot 100ft. at reduced targets; then when the day for the match comes all liave to do is to change the barrels and am ready. You see, I get the same sights and the same trigger pull with the small barrel as with the large one, and use the same stock. Now, this practice is nearly as good as longer-range shooting and costs—nothing. The barrel I use for hunting is a 40-70-270. I have in reality three guns, 22, 32 and 40-cal, barrels. These I take in a case with one stock on many pleasme and business trips, as they

CHICOPER, Mass.

Editor Forest and Stream:
In your valuable paper of the 25th inst., I find a request from Mr. Romer that I answer two questions. 1st. Why the mnzzlelonding rifies used in the Forest and Stream trajectory tests were not hunting rifies. Ans.—By the manner of loading. 2d, To make good my claim that the difference in the heights of bullets on the screen at 160yds. on a range of 200yds, shows the accuracy of the rifie. Ans.—I have talked with some of the target shooters here using heavy rifles fitted up with the muzzle paraphernalia for fine work, and they say, "Give me a gun that will hold the clovation as closely as I can hold the windage, is all lask." If Mr. Romer wants more proof, I am instructed to invite him here to take part in the next match of the N. V. P. and O. Shooting Club, and they will try to demonstrate the fact on a 200yds, range. My further statements in regard to the Forest AND Stream trajectory trials, I believe, were based entirely on the report of same contained in Forest AND STREAM at the time, and I accepted the report then, and do now, without a question.

What little rifie shooting I do is done off-hand. I am using a Stevens (instead of a Mayard) rifie 32-40, 34in. barrel, 93(Bus., with which I have recently made the best shooting I have ever done with any rific, and yet I am not happy.

JAMESTOWN, N. Y., Nov. 2S.

Camp-Hire Hlickenings.

THE hero's name, for perposes of this sketch, was Hopper, and as a successful hunter I have never seen his equal. The intuitive knowledge, buoyant enthusiasm, untiring muscle, keen eye and cool nerve that mark the thorough sportsman were his in a remarkable degree. When hunters of common stripe searched day after day for deer in vain, he knew just the happy nook on the mountain side where a buck was sure to be lying in blissful seclusion, and would bring him to camp with almost miraculous certainty. Deeply versed in all the witching lore of woodcraft, he would follow the trail of a wounded deer with a skill and accuracy that called forth the adminstion even of the Indians. He had his foibles and weaknesses, however, or he must have been more than human. Next to his passionate love for all kinds of sport was a jealous devotion to a noble jet black beard that formed his most notable feature. This darling of his heart kept him tolerably well engaged in his leisure moments, and detractors were not wanting who insinuated that a pocket comb and glass were as essential items of Hopper's equipments for a morning hunt as were rifle and ammunition. Almost on a par with his fondness for the outward and visible sign of manhood was his love for practical joking. Any sort of larking or horse play that might be proposed always met with his warm approval and support; and he prided himself—with good reason, too—on being just a trifle more wide awake than the balance of the boys, and on always having the laugh on the right side. As he said himself, "Bet your life, boys, you don't catch me; I guess I know the difference tween a fir knot and a blue grouse." To any one who has devoted half an hour or so to a vain search in the branches of a big fir for a cock blue grouse. To any one who has devoted half an hour or so to a vain search in the branches of a big fir for a cock blue grouse. To any one who has devoted half an hour or so to a vain search in the branches of a big fir for a cock blue grouse. I know the difference tween a fi

chance to shoot he was clattering along the hill back to his old lair. I ran as fast as I could to the nearest point whence I could see into the hollow and managed to get a shot at him as he was trotting through the fern. I was blown by the run, however, and missed him.

The deef steered for the other end of the semicircle, and just as he had reached it and was climbing up a steep path to the summit, I saw Hopper on the flat beneath, raising his rifle to shoot. I watched the buck, which had stopped for a moment, and just then the rifle cracked and down toppled his majesty, rolling over and over to the bottom. Then Hopper called out, "Didn't want to spoil the meat. Nipped him in the neck. Sweet, pretty shot, wasn't it?" It certainly was, for, sure enough, the bullet was just below the head, and a long shot at that. We dragged the deer to a convenient spot, gutted him, and prepared him for packing, all the while admiring his size, the heauty of his horns, and so on. All at once a brilliant thought struck Hopper. "Say, let's put him by that log and prop np his head, so that when Frank comes along he'll think the blessed thing's alive and shoot at it." No sooner said than done; the buck was artistically and get some more shooting.

Hopper took one side of a tiny stream that rippled through the woods and I the other. In less than five minutes I heard him shoot, and soon a couple of yearlings, buck and doe, came running over to my side of the creek. I blazed away at the leader and dropped him in his tracks, and then cracked away at the second with the other barrel. It ran fifty or sixty yards and then dropped. Satisfied with my luck I got the pair ready, shouldered them both, and started back for the rocks, thinking Frank might have come by that time. There was no sign of him, however, so I sat down for a rest and a comfortable smoke. In a few minutes down came Hopper with a deer on his back, as he reached the edge of the bluff I saw lim suddenly start back, drop the deer hurricelly from his back, and crawl stealthly

Sea and River Hishing.

Address all communications to the Forest and Stream Pub. Co.

ALASKAN TROUT AND THE FLY.

ALASKAN TROUT AND THE FLY.

Editor Forest and Stream:

Being something of an Alaskan as well as a fly-fisher myself, I was much interested in Dr. T. H. Streets's "Defense of Alaskan Trout," published in your issue of Nov. 18. He has certainly cleared up, once and for all, the old superstition that Alaskan trout would not rise to the fly. Nevertheless, I am afraid that I must contest list claim to the position of "the pioneer fisherman with the fly in Alaska." If I am not very much mistaken my former mess-mate, Dr. George F. Wilson, U. S. Army, at that time surgeon of Lieut. Schwatka's exploring party; and myself, caught a good string of trout in Unalaska with the artificial fly, at least a year before the Patterson, with Dr. Streets on board, came through the Straits of Magellan. And even we, I am afraid, can not be called "pioneers," as I have heard that some of the custom house officials stationed at Unalaska had had some successful fly-fishing years before we came there. Still, Unalaska is so far off that it is no wonder that it takes a long while for the intelligence about such matters to reach civilization, and the remark of the writer that these Unalaska trout "took small dark flies greedily" might easily escape general notice, occurring, as it does, in a Government report (Lieut. Ray's "Report of the Expedition to Point Barrow," p. 132) among the scientific notes on the fishes collected by the expedition. Some details of our fishing may be of interest to your readers.

We were on our way back to civilization after our two years' solitude in the Arctic regions, when we picked up at St. Michael's Lieut. Schwafka and his party, who had in the story of which is well known to all readers of Forest AND STREAM. This was in September, 1883. As the last year ty reached St. Michael's, they were very glad to put up with the crowded accommodations of our little school and the said, with the bait. Sept. 19, having completed the observations we had to make, and having no more duties to attend to on board, the Doctor a

little tumbling trout brook, which comes down from the mountains for all the world like a New England moun-

little tumbling trout brook, which comes down from the mountains for all the world like a New England mountain brook

Of course we had inquired of the resident traders what our prospects were for success, and all had declared that there was "no trout fishing at this season," and that the only time to catch them was "early in the spring, soon after the ice went out." (This was something like the dictum, "Alaskan trout never rise to the fly.") We, however, had faith in Capt. Herendeon, the interpreter above mentioned, who had frequently been at Unalaska with the coast survey parties, and who declared positively that he had caught trout there at that very season of the year. In deference to public opinion, however, we did take with us some newly salted salmon, the only available bait we could obtain, but we determined not to use it except as a last resort.

Well, there is no need for me to describe how we tramped up that little stream in the rain, working against the breeze, and what a good time we had. The fishing was just like any other fishing. The trout were there, and we caught them in spite of the season, and we caught them with the fly, too, in spite of their being Alaskan trout. I shifted my tackle once and tried a piece of red, raw salmon, with a view to capturing a big trout we saw in one pool, after he had declined my files, but he paid no more attention to the bait than he had to the flies. We took in all fifty trout, averaging about three to the pound, though Dr. Wilson took one beauty of over a pound weight, and I struck and missed one fellow that, to judge from the breadth of tail he turned up, must have been a good two-pounder. Twenty of these trout we took out of one little pool, standing and casting side by side, getting a rise about every other cast, and hooking a fish about every other rise. They were of the species known to ichthyologists as Salvelinus malma, the Pacific red-spotted trout, but perhaps better known to sportsmen by their popular name of "Dolly Varden trout." They were bright and

THE BLUE CATFISH AS GAME.

THE BLUE CATFISH AS GAME.

ALL my life I have taken great delight in fishing, and have had the pleasure of landing many of the game fishes of our waters. Among those which have furnished the most sport is the blue, or channel cat. I know that most sportsmen do not so consider it; but by what right it is thus excluded I am unable to understand. It certainly cannot be because it is not gamy, for of all the fish that I ever hooked it makes the hardest fight for its life. It differs from them in that they, when struck, leap out of the water, and rush through it with their mouths open, thus making it much easier to conquer and land them; while the catfish takes the hook in its mouth and starts for the bottom of the stream or lake, with a vim that will test the tackle of the best expert. I have had more real sport with it than with any other fish I ever tackled. It is full of fight from the strike to the landing net, and requires longer to bring it to hand than any other of its weight.

Some years ago a party of us were camped on Severn River. We went there to catch bass, and did not want any other fish to take our bait. We caught as many bass, perch, pickerel and maskilonge as we could use in a camp of thirty-five. One day we were trolling up the river, using a large spoon, when there was a strike as if the hook had fastened on a log. The boat was stopped, and after a hard fight an Sibs. channel catfish was landed. On another occasion three of us were still-fishing from a boat in one of the bays of Sparrow Lake. We had no luck for a long time, and were becoming careless and discouraged, when I felt a tug at my hook as if something intended to upset the boat. In a moment we were all excited by the mighty efforts of the captive to free himself from the hook. He did not rise to the surface, but seemed determined to take us down with him. I had a very strong tackle so had no fear of a break when the strain was put on it to see what kind of a creature was causing so much disturbance; but it would not come to the surface.

general feeling of dislike that is so often manifested toward it.

I would not desire to see any other of the catfish family brought into the same position as this one, as they differ as much from it as it does from any of those which are generally considered as so much finer when on the table. If any of your readers have never tried to satisfy a sportsman's appetite on a breakfast of "catfish and coffee" with the other et ceteras, let him try it once when he is hungry and has a hard day's sport before him, and I think he will be convinced that it is very toothsome and has great staying qualities. And if any one of them has been in the habit of ignoring its claims to a place in his favor, let him give it a chance the first opportunity that presents itself, and if he does not change his opinion of it then I am either no prophet or else no judge of good sport and royal living.

ether no propose of the control of the regular game fish will not thrive. They can be grown in ponds, and will repay one for the time, trouble and expense. They are certainly far superior to the carp as a table fish, and will not require nearly so much care. But they do best when they

live in pure running water. This is not the case with them only, but with all other fish. If they have grown in a muddy stream or pond, the flesh will be rank and strong, but in a stream of clear, cold water the texture and flavor is entirely different. Under any circumstances their flesh is very rich and will not agree with a delicate or weak stomach.

BLAIRSVILLE, Pa.

FISHING IN JAPAN.

FISHING IN JAPAN.

Editor Forest and Stream:

My daughter, who has been a resident of Japan for a number of years, sometimes writes us letters containing items which I consider of sufficient interest to publish. In a letter lately received she tells me something about fishing in Japan, which I think will interest the readers of Forest and Stream. She and her husband, Rev. E. C. Hopper, are both fond of angling. Being driven out of Tokio the past summer by the cholera, they visited Kobé, Nikko, Futago, and other places, where, however, they had been several times before. Futago (about ten miles from Tokio) is a famous place for ai fishing. I will condense as much as possible. Writing of Futago, Mrs. H. says:

"Now about the fish. The ai is called trout in English; but it looks and tastes exactly like smelt. ** ** As a

"Now about the fish. The ai is called trout in English; but it looks and tastes exactly like smelt. * * * As a rule, fish are taken with the net, though sometimes a bamboo rod, with line and artificial fly, is used. * * * * To go fishing in Japan does not mean to fish yourself, but simply to look at the fishermen catch the fish, for which you have to pay them. They put the fish into baskets, and you come home loaded with fish and tell your friends you lave been fishing, have had a good time, and then lave a feast for supper." An practice somewhat resembling this is not very uncomen here. The put the lave a feast for supper." An practice somewhat resembling this is not very uncomen here. The supper of the air fishing which the fish. My daughter, in addition to the row description, sends me a transcription from a Japanese hand book, which I give herewith, as it is full of detail, as follows:

"Tutago is a place much resorted to during the summer months, on account of the air fishing which the river affords. This fashionable amusement of the Japanese (for sport it can scarcely be termed) is quite characteristic of their tastes. The pleasure consists in sitting in a boat watching fishermen (who are engaged for the purpose catch fish with nets. The scene on the river is very picturesque, and it is quite worth visting. Putago to witness it, and also to taste this delicately formed fish, free caught and cooke in Japanese fashion.

April and ends in the early part of November. The best months are from July to October. The ordinary method of catching the fish is by using the Tō ami, a circular net made of silk and about eight feet in diameter. The circumference of the net is weighted with pieces of lead and to the center there is attached a line at the end of which sheet is a loop. With a little practice a fair amount of dexkerity can be attained in throwing he net which should be thrown under under the fish of the head of the weight of the river is a loop with the same propers of the end of the weight of the present of

Sensibility of Fishes to Pain.—Editor Forest and Stream: In yours of Nov. 11, I see a note by "O. O. S." in reply to me. I find upon inquiry of Dr. Marshall, that it was a companion who did the cutting of the live fish, and that the fish was not thrown back into the water, but fluttered out of the hand into the water while being carried to the bucket. The object of my article was to prove that fishes have very little sensibility to pain, and I stated a fact which was so remarkable, that I brought in the Rev. Doctor as my authority, as without the very best authority I would not believe it myself. In "Humboldt's Travels," he mentions that he was astonished at seeing the same sharks' repeatedly taking the bait, while their mouths were terribly torn and bleeding from previous hookings. It goes to prove, that such cold-blooded animals have not that sensibility to pain that is generally supposed. Comparing them with warm-blooded animals we make a great mistake; our premises are wrong, therefore our conclusions are erroneous. This is proven here and elsewhere, as we cannot suppose that the fish alluded to was in sensibility different from fishes of the same species, or from fishes in general. Our mode of fishing is to fasten on the hook a live minnow, or live worms, frogs, grasshoppers, etc. Experience has taught us that fish do not like dead bait. We suppose God taught them. Sometimes they will take artificial bait, but by all odds live bait is the best. If we cannot get suitable live bait, we cut up a live or dead bait, as the case may be, we do not wait till it dies and then fish with it. We suppose that "O. O. S." never fishes with live bait of any kind, or if he does that he ties it on with a soft string, on a soft bed of cotton, with some soft mollifying ointment to cure its wounds.—B. F. M.

bed of cotton, with some soft mollifying ointment to cure its wounds.—B. F. M.

Minnow Experience.—When a small boy my passion for gunning and fishing was as large in proportion to my size and knowledge as at present. With the first thick ice I was out with pail and net after minnows for hait. One bait in use here in eastern Massachusetts is the mummy chub, zo-called; the other is the common silver minnow. The mummy is by far the toughest and long-lived, but is not so good a lure to the big-mouthed "winter king," the pickerel. The mummy is caught with scoop nets in the creeks and shallow pools near some salt-water bay, and while it will die in a short time if kept in a pail of water, it will live hours and days in a wet piece of flamel if kept from heat and extreme cold. The minnow is caught in the brooks with scoop net or more commonly (here where bricks are made) in the brickyards. In some of the brickyards large shallow basins have been made in excavating the clay. In these basins, which are usually three feet or more deep in the center the minnows are found, and may be caught through the ice on a sunny day by cutting a hole large enough to admit the drop net, which is easiest made of a barrel hoop and mosquito netting and baited with sprinkled cracker or bread crumbs; the minnows will swim into and over the net after the crumbs, and I have caught as many as a pint or more at one haul. As we have to ride six miles to the best ponds a pail would be unhandy and would kill a good many fish, so we put them in a wet blanket or other thick piece of cloth, and after getting to the pond carry them in the pocket, or often in the hat to keep them from freezing. We have quite good fishing here and strings of from four to six pounds is caught and usually finds its way to the market window for exhibition.—Cohannet.

A Man-Eating Shark.—A very rare shark was captured on the south shore of Long Island, near Quoge, last week, and has been lying at Mr. Blackford's for several days. Its length was 7\frac{1}{2}\text{ft.}, and it weighed 280lbs. Prof. S. E. Meek identified it as Lamna cornubica, Gmelin, and it is the first specimen of this formidable monster taken about Long Island, although the U. S. Fish Commission has collected a few at Woods Holl. This shark is probably entitled to be classed with the "maneaters," and from the dentition of the beast the crowd at Fulton Market drew the conclusion that he was an undesirable bathing companion.

A Torpedo Caught at Sandy Hook.—Last Monday a cod fisherman at Sandy Hook hauled up a large torpedo or cramp fish on his trawl, and was partly stunned while landing it. The fish is an unusual one about New York Harbor, and is on exhibition at Mr. Blackford's. Its weight is 150lbs. and it is the second one that has come to Fulton Market in twenty years. In a few days it will be dissected and the electric batteries in its head exposed to view.

THE AMERICAN SALMON FISHERMAN.

THE Loudon Fishing Gazette has this to say of Mr. Henry P. Wells's "The American Salmon Fisherman" (Harper & Bros., New York; price, \$1.50). The Gazette's notes are interesting as showing how the author's views are received in England:

showing how the author's views are received in England:

Mr. Wells, in his introduction to the present volume, "desires no
more grateful reward than the same kindly reception which has
been the good fortune of its predecessor." We think there can be
ittle doubt that he will get his reward. Although written for the
guidance of the novice, there are so many subjects connected with
salmon fishing touched upon in this work, and Mr. Wells knows
so well how to explain his views, and is withal so suggestive and
practical, that we venture to say that the most experienced salmon fishermen will read it with interest, and glean some useful
ideas.

practical, that we venture to say that the most experienced salmon fishermen will read it with interest, and glean some useful ideas.

Of course, on many points, British and Irish salmon-fishermen will not agree with Mr. Wells. It would be too much to expect that they should; indeed, in all probability, their first impression will be, "What can an American tell us about salmon fishing worth knowing that we do not know?" If they are interested in Canadian salmon rivers, the very first chapter will settle this question, for it contains information as to how and where fishing is to be obtained, together with a map and list of the rivers, with brief notes on them.

At one of those interesting "Discussions" of the Fly-Fishers' Club last winter. Dr. Hamilton introduced the subject of the remarkable difference in the average size of salmon frequenting different streams, and gave, as did other anglers present, instances from his own experience. Mr. Wells has the following note with reference to this fact in the life history of salmon:

"A Salmon Problem.—Since salmon obtain their growth in the sea, and lose rather than gain in fresh water, it would seem as if all rivers ought to furnish lish of approximately the same size. Such is not the fact. In some rivers, excluding extremes as itseems to me should always be done in such cases, the fish will run about 100bs, or 120bs, in weight, and a fish of 180bs, will be a rare prize. In other rivers no lerger, and in the immediate neighborhood of the others, the fish may average 200bs, and over, and fish of 400bs, be as ccumon as fish of 180bs, in the rivers first alluded to. This difference is not a casual affair of a single season, but a permanent characteristic of each river. A satisfactory reasen for this, which will not conflict with what are supposed to be settled facts, I have yet to hear. Is it because the various clans of fish which converge to their native rivers when leaving the sea, diverge