liue through the holes in each end, and putting on the cover nicked it so that the shot could not escape; and after tying a knot in the line at the required distance from the book, the "thumper" was pronounced complete. By this time we had drilted into deep water, and after a few strokes of the oars the "thumper" was dropped overboard. Down it went to the depth of about fifty feet, and immediately we started on a direct line down the middle of the lake with a slow but steady stroke. Yet our party was doomed to disappointment, the "thumper" soon began to thump the bottom when at the other end of the lake, so we gave orders to "about ship" and try it once again.

We had nearly arrived at our starting point once more, feeling rather disappointed, when the man at the line shouted out to hold up a bit, as we had fastened to a rock or something on bottom. A moment afterward he exclaimed, "What a whopper!" and sure cuough we had hooked a fish, and a game one at that, for he began to sink slowly although we tried to induce him to rise. After his Lordship had take down, then up, and in all kind of ways did that fish' try to get away, but it was of uo use, for our lines would have held a shark. Presently he made a dart at the boat and then there ensued a scramble to pull in the slack, when, suddenly making a dive, he sent the line whirling out again; then up he eame almost to the surface on the other side of the boat. The water being as clear as glass, we could see him as he lay perfectly motionless, excepting a slight quivering of the fins and tail. It was a sight to make the heart of any sportsman thump, looking as large as a good-sized shark, and if anything a bit more savage. Taking hold of the line anew to give him another pull he darted off in a circle around the boat, and attall mistake, for a good steady pull now brought him directly under the stern with his head just breaking the water, while the eaptain taking advantage of position, drove the gaff hook (in a most unsportsmanlike manner) house had not the gaff h

### AGASSIZ AND ANGLING.

AGASSIZ AND ANGLING.

On the 28th of last May, the seventy-eighth anniversary of the birth of Louis Agassiz, the Cineinnati Society of Natural History held a memorial service. The paper, "In Memoriam—Louis Agassiz," read on that occasion by Dr. James A. Henshall, has been printed in the Journal of the Society. It is a review of the life and work of the great naturalist, written by one whose veneration for the subject of his paper is manifest on every page. Speaking of the young Agassiz's taste for angling and studying the habits of fishes, Dr. Henshall says:

"Another writer says: 'Before he left school (at Bienne), he began to collect and study into the habits of fishes.' Now, the love of angling once firmly implanted in a boy's heart, it follows him through life, never to be wholly eradicated, but oftener to grow stronger with the accumulation of years, and not seldom influencing the whole course of his life. I know many men whose interest in natural history, and especially in biology, dates from the days of earliest childhood, when, with pin-hook and willow wand, they first essayed the gentle art, and produced consternation dire among the chubs and shiners of the brook. We, of the gentle craft, can readily imagine how eagerly young Agassiz turned from the wearisome school-room to the bright rippling waters of Lake Bienne, or to the foaming trout brook of the Jura, and can fully appreciate the happy transition from the musty books of elassic authors to the fair, bright pages of Nature's book. It seems to me that these early impressions, and this first love, must have had the greatest influence in shaping his subsequent career, as we may presently see.

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"When the boy Agassiz began collecting and studying the habits of fishes, the cell theory was unknown, but there was no minnow too small to escape his observation, and no part of that minnow too insignificant for his closest serutiny and study. In this way he was the first to separate and properly define the most difficult group of fishes, the Cyprinidae, as a family, by the form, number and arrangement of their pharyngeal teeth; and any one who has ever examined the minute teeth in the throat of a minnow, can appreciate, somewhat, the amount of careful study and observation involved in his investigations.

"In his study of the salmon, trout and grayling species, he exhibited the same careful and characteristic mode of inquiry. Of this family Günther says: 'As much time and patience are required for the investigation of a single species as in other fishes for that of a whole family. \* \* The almost infinite variations of these fishes are dependent on age, sex and sexual development, food and the properties of the water.' In consequence of these variations and peculiar ities, many species had been predicated upon coloration alone. Agassiz showed the fallacy of this, for he found that fish in clear, sunny waters, with gravelly bottoms, were highly and brightly colored; while those in shady streams, or where the bottom was dark or muddy, and the water not so clear, were correspondingly dusky in lue; and that bright fish taken from waters of the former character and placed in those of the latter would begin to fade in a few hours, and in a few

days or weeks would become entirely charged in hue. He found that the color of brook trout of neighboring streams was influenced by the color and quantity of the water, and that even trout of the same stream differed in color as they frequented the shady or snnny side.

"Now, while most persons are capable of admiring the general result of a long series of observations or experiments, many ean not appreciate, or may even be disposed to make light of, some of the seemingly trivial preliminary steps leading to that result. And a person of this character coming upon Agassiz beside a tront stream, studying the changes iu coloration of the brook trout—thau which there is no lovelier object on God's footstool—might have thought it a sad waste of time, or at least, a subject unworthy the notice of so wise a man."

Rod Dimensions.—Casselton, D. T.—Editor Forest and Stream: In reply to the request of "Hollow Rib," in your issue of the 13th, I gladly give the dimensions of my bethabara rod: The butt, of ash, is 18in. in length; butt-cap, \$\frac{1}{2}\text{in.}\$; then swell for \$\frac{3}{2}\text{in.}\$ in length to a diameter of 1in.; then taper \$\frac{3}{2}\text{in.}\$; making hand-grasp 7in. in length and tin. greatest diameter. Reel-seat, 4in.; uniform diameter, \$\frac{7}{2}\text{in.}\$; straight taper for 4in. to \$\frac{1}{2}\text{in.}\$; then sudden concave taper for the ferrule. Joint, 42in; bethabara tip, 38in.; lancewood tip, 40in. Ferrules—\frac{1}{2}\text{in.}\$; with laneewood tip, 8ft. 4in. Weight, with either tip, 6\frac{1}{2}\text{cz.}\$ If "Hollow Rib" intends to make a bethabara rod, he will save time, trouble and temptation to profanity by sending his wood to Thos. H. Chubb (see advertisement in Forder And Streem) and have it turned to suit him. By the way, I am glad to add my mite of commendation to this firm for the fair dealing and prompt attention to orders which has characterized their trausactions. I have during the past four years ordered material from them for over a dozen rods, and in every case have received just what I wanted, with but one exception, when I probably did not make my wants clear, but when I called their attention to it the mistake was promptly and cheerfully rectified. In marked contrast was the treatment I received from a celebrated Chicago and New York firm, to whom I sent, some three months ago, for a \$\frac{1}{2}\text{in.}\$ screw, flat bottom butt cap, inclosing money for same. In reply I received a \$\frac{1}{2}\text{in.}\$ nound-bottom solid cap, which I returned, repeating my previous order. I havn't heard a word from them since then, although I have written them three times, asking them either to send what I want or refund my money. The amount of the latter is so small that I am glad to charge it to profit and loss, as the price paid for the knowledge that I had better have nothing

Stores of information on many and sundry points.—H. P. Ufford.

Eels,—Editor Forest and Stream: I want reliable information how to eatch and dress eels for market with information how to make and use the different wire traps, etc., for tide-water brooks and ponds, and where the most likely places to look for them to spear after they have bedded for the winter. In sbort, I want to know all about them, their habits, usual time of ascending the brooks to bed, which they are supposed to do here on the island of Grand Manan, but I can find no one that knows anything for certain about them.—Philip Newton. [There is no book which gives the information required. Beside accidental captures with hook and line, eels are taken in winter by spearing them through holes in the ice, and this requires a local knowledge of their beds, which can only be obtained by examination and trial. In the spring they are taken in cel-pots, which are usually made of elm splints or willow. These are for sale in New York and other cities, and are about three feet long and a foot or more in diameter, with a movable cap at one end and a funnel in the other, like some rat traps. Pots are baited with minnows or fish offal, and anchored and marked by a buoy. In summer eels are speared at night from a boat with a bright light in the bow, which shows them plainly in two to six feet of water. They are also fished for at night with "bobs" made by stringing very large angle worms their entire length on three yards of linen thread until the thread is full, when it is wound round the hand and tied through the middle. The bob is used over the side of a boat, and if in a tideway or current, a sinker is needed. It is kept a few inches from the bottom and when a bite is felt is slowly raised to the surface and the eel quickly thrown into the boat, when it drops off, the only hold being that of the eel's teeth in the thread. Eels move from fresh to salt water in October in the State of New York, some, however, remaining in the mill ponds all winter. A fair siz

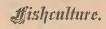
Barnegar, Aug. 21.—The fishing, all things taken into consideration, is very poor. Occasionally a good string of weakfish is eaught, but only in exceptional cases is this so, and then it is all laid to the credit of a "streak of good luck." The menhaden boats on this coast are blamed for the scarcity of fish, and a good many objurgations are indulged in by the people along shore at the mere mention of the menhaden folks. At Beach Haven, it is reported; the fishermen on the beach recently indulged in a little rifle practice, using the crew of the menhaden boat for targets. It resulted in some lively dodging behind masts, smoke-stacks, rigging, etc., by the members of the erew of that particular boat. The latest returns fail to report the number of killed, wounded or missing in this engagement, and the last seen of the eraft she was putting out to sea under a full head of steam. This rifle practice is reported as having accomplished one desirable object, in driving the menhaden boats off that coast for a while. The writer counted eleven of the black piratical craft off Harvey Cedars in one day last week, engaged in their calling, and was informed that it was not much of a day for menhaden boats either.—Woodchuck.

New Jersey Coast Fishing.—Philadelphia, Aug. 22.—Weakfish are still extremely scarce at Barnegat and Tuckerton bays, and few are being brought in. Small sea bass are, however, plentiful, and sheepshead have been taken throughout the entire season in numbers great enough to amply supply all the hotels on Long Beach, which have been continually crowded with guests. During the past week good squidding for bluefish was enjoyed by sailing parties near both Barnegat and Little Egg Harbor inlets. None upward of one to two pounds were boated.—Homo.

BLUEFISH IN SOUTH BAY.—Up to last week the fishing has been poor on Great South Bay, Long Island. The schools have lately struck in, and there has been good fishing. Last week one boat took 178 fish, and another took 150, while the lowest eatches were from twenty to thirty to each boat. The fish averaged from three to three and a half pounds each, and from twenty to thirty boats have been fishing daily. The best points are Sayville, Bay Shore and Babylon.

NEWPORT BASS.—Newport, Aug. 17.—Bass are unusually plenty. They struck here about two weeks ago. I took twenty last week, weight from  $2\frac{\pi}{4}$  to  $16\frac{1}{2}$ . I should be pleased to answer any inquiries in regard to striped bass fishing in this neighborhood.—W. M. HUGHES (P. O. BOX 56).

Thousand Islands.—Cape Vincent, N. Y., Aug. 18.—The fishing is first-class at this point now; plenty of bass and pickerel. The sportsmen from down the river and Alexandria Bay are all turning this way.—W. P.



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PROTECTIVE CONTRIVANCES FOR EGGS.

[Read before the American Fisheries Society.]

BY PROF. JOHN A. RYDER,

[Read before the American Fisheries Society.]

BY PROF. JOHN A. RYDER,

MR. PRESIDENT AND GENTLEMEN: A discussion of the apparatuses by means of which the ova of fishes are protected will, I think, be of interest to the members of this Society. I will roughly classify the eggs of fishes into four divisions, and call one of these groups "buoyant eggs," another "adhesive eggs," another "suspended eggs," and the fourth "transported eggs," another "suspended eggs," and the fourth "transported eggs," the latter class embracing such as are hatched in the mouth or in receptacles especially developed on the outside of the abdomen or under the tail of the parent fish—usually the male; in nests built by the males, or viviparously developed in the ovary or the oviduct of the mother.

The egg of the cod will serve as the type of the first group, it is without an oil-drop opposite the germinal pole, where the embryo develops, consequently the egg is rendered buoyant. That type is represented by the eggs of the Spamsh mackerel, of the bonito in the Chesapeake Bay, and of the cust and a number of other marine fishes.

The second group, which I have called adhesive, is represented very well by the eggs of the goldfish, which adhere simply to plants and weeds. Other species whose eggs are similar to those of the goldfish, are the blennies, which lay eggs in radiating adherent groups. The gobies have a curiously shaped oval egg, almost conical at either end, with tirts at one of their tips. These tufts seem to be made up of small filaments. In other species, too, the eggs are adherent, as is the case with those of the cunning little Gobiesox. In other cases the eggs are held together in narrow strips, and adhere together by means of an exterior mneous or sticky envelope, just within which again is a very thick, elastic, perforated membrane, as the eggs of the yelloy perch, This sticky substance glues the round eggs together at their points of contact, leaving spaces between the ova, onabling the water to pas directly through the

which seems to glide down on one side to the point where the attachment takes place, and where this mucous substance hardens under water, firmly fixing the egg to the foreign bodies.

The eggs of the slime-eels or hags, which are parasitic upon the cod and on sharks, are also peculiar. These eggs are supplied with a bundle of hooks at each end. I am not sure of the special function of these hooks, but it is probably for suspending the eggs in some way. There are other cases in which adherent eggs are held together in large masses as thick as a man's hand, or they may be spread out over a flat surface. This is the case with the eggs of the catfish; in these, however, we find a contrivance which is peculiarly adapted for protecting the eggs against the violent motions made by the male who acrates, attends and incubates the eggs. In these eggs there is an inner true egg membrane, and an exterior mucous adhesive layer, separated from the inner one by elastic pillars placed at intervals, so that the resulting arrangement is an extremely elastic one, and yields readily to the motions made by the male with his fins. In this case the eggs adhere together in masses very much in the same way as in the eggs of the frogs.

There is yet another singular contrivance which was first described by Professor Jeffries Wyman, of Boston. This is found in a species of the armored catfish of South America. In this case (Aspredo) the male fish is provided with a numerous series of little stalks formed on the under surface of the abdomen, and the cup-like extremities of the stalks into which the eggs are received are supplied with constitutes not only a supporting stalk but also a kind of placenta. It is said—although I am not sure that the evidence is very trustworthy—that one species of the gar lays its eggs in strings in a single row, like the common toad. There are other cases in which the ova are uncovered and directly adherent to the abdomen or under side of the tail, as in the case of some of the pipe fishes of Europe. In some o

occurring in any of the true bony or Teleost fishes, since it is formed of horizontally interwoven fibres. The egg case of the Cestracion, or Port Jackson sharks, is formed in the same way, but instead of being flat and quadrangular, is twisted into a spiral. I am not positive, however, that the eggs of the Port Jackson sharks are suspended. Another type is found in the \*Scombresocidac\*, in which the entire egg membrane is covered with strong filaments which wind round each other and intertwine with the similar filaments of contiguous eggs, which are consequently held together and suspended sometimes in masses several inches in length, such masses being commonly found in great numbers hanging to the meshes of pound nets during July and August. The egg itself measures one-eighth of an inch in diameter. There is another somewhat similar type in which the egg is very much smaller. This is the egg of one of the commonest fishes found in the waters tributary to the Chesapeake Bay, viz., \*Menidia\*, one of the \*Antherinidac\*. They are provided with four filaments attached to one side of the egg, by which they are in like manner suspended and held together in strings. Again, there are still other types in which the ova are hatched in the mouth, as in the case of \*Arinac\*, or marine catfishes. Their eggs are very few in number, but are as large as those of a robin. Some of the smaller blennies take advantage of a dead oyster shell in which to conceal and deposit their adherent eggs.

röbin. Some of the smaller blennies take advantage of a dead oyster shell in which to conceal and deposit their adherent eggs.

There are yet other cases in which the male builds a nest. One of the most extraordinary instances of this kind is the common four-spine stickleback (Apeltes), which I described four years ago. The male, which is much smaller than the female, has a pouch on the right side of the rectum, from which is poured out a viscil secretion, and which is spun out into threads fitfully by the animal as he goes around a bunch of water weeds like a bobbin to build a little basket-like nest for the eggs. After he has induced the female to oviposit he tends the eggs very faithfully until they hatch. Some investigators go so far as to say that after the eggs are hatched the male stickleback will follow the young ones which leave the nest too young to take care of themselves and put them back in the httle cradle in which they were born to thus prevent their being prematurely devoured by other fishes. At one side of the eggs of the stickleback there are minute button-like excrescences. These are also found on the eggs of European species. One of the South American cattishes (Callecthys) also builds a nest, but the nature of it I am not familiar with. The male of the paradise-fish ejects from his mouth bubbles of mucilaginous matter, which floats in the form of a cake, and on this the eggs are deposited and hatched out. The Antennarius and the fishing frogs of the deeper ocean deposit their eggs on floating masses of sargossa weed.

We are, of course, all aware of the number of forms of salmonoids which prepare beds for the better protection of their eggs. The same may be said also of the physical behavior of and lampreys.

monoids which prepare beds for the better protection of their eggs. The same may be said also of the black bass, sun perch and lampreys.

I also wish to call your attention to the physical behavior of different species of ova as seen in several groups. This consists of the disposition manifested by certain types of eggs to place the germinal disk in some particular position with reference to the yolk. This disk is directed almost downward in light or buoyant eggs. In the case of the salmon, whose eggs are very heavy, the disk rests on the top of the yolk, and the larger oil drops lie just underneath the germinal disk. In the case of the shad the germinal disk always lies at one side of the yolk, no matter in what position the eggs may be placed. The buoyancy of the oil drops in the salmon's egg keeps the germinal disk directed upward. In the Spanish mackerel its buoyancy keeps the disk directed downward. This peculiarity has some physiological significance, but I do not know what it may be, unless it be for the purpose of the better protection of the egg, so that the embryo may have a better chance to survive.

has some physiological significance, but I do not know what it may be, unless it be for the purpose of the better protection of the egg, so that the embryo may have a better chance to survive.

It was remarked yesterday in Mr. Mather's paper that the eggs of the smelt were remarkably hardy and would stand asage which other ova would not. This calls to my mind the capacity which some eggs have for resisting adverse conditions. There are species which, in order to hatch them out successfully, it is only necessary to change the water once in three or four hours; as, for example, in the case of the stickle-back. With the shad this method would not answer. Nor could the ova of salmon be successfully hatched out by such treatment. What I have said on this point shows, I think, that there is a great difference in the power of resistance to adverse conditions manifested by different species of eggs under similar conditions. In the case of the silver gar, for instance, I had at last only three eggs with which to work out the later stages of development, and, although I had them under the microscope fully twenty successive times, each time brushing off the accumulations of filth which would lodge among the filaments covering the egg membrane, yet during all these manipulations the normal development of the embryos remained unimpaired.

I will now call your attention to the viviparous types. The one which I have worked out most fully is the genus Gambusia. The parent fishes were from 1½ inches to 1¾ inches in length, and are found along the Chesapeake Bay and its smaller southern tributaries. This is a fresh-water, or at least anadromous viviparous species, spawning in July and August. The ovary is lodged in the body cavity, and the vessels pass backward to it, like the subdivided stem in a bunch of grapes to the single berries, each one of the follicles in which the single eggs grow receives a twig from the main vessel and is covered with a network of vessels which branch off from the main twig which answers to the micro

empty yolk sac is in this case somewhat similar to that of a placenta.

The eggs of the surf perches of the west coast are developed in membranous curtain-like folds of the upper wall of the ovariau sack. These membranes have a longitudinal direction, and after the female is pregnant and the embryos are somewhat advanced in development, they hang down between the embryos, the latter being packed into the ovary somewhat like sardines in a box. The peculiarity about the development of the young in the ovary is that the vertical fins of the fectuses soon acquire an exaggerated development and have a special set of blood vessels sent to them, the fins also develop marginal prolongations which become highly vascular but afterward atrophy. This arrangement as well as the highly vascular skin of the fectuses clearly has relation to the respiration of the embryos while in the ovary. Another peculiarity about this type is the enormous development in the embryos of the back part of the intestine beyond anything I have found in any other kind of fish embryos. This hypertrophy of the intestine is of transient character, because this structure afterward gradually diminishes in proportional size and acquires

the relative proportion in respect to its diameter found in the adult fishes in which there is no such an exaggerated development of the intestine. The earlier writers, Girard and others, who described these forms, mistook this projecting back part of the intestine for a yolk bag. The fact, however, is, as we know from the figures which are in existence, that this was not a true yolk bag, but merely the intestine developed as I have described it to you with its terminal part thrust down and backward so as to project below the abdominal profile somewhat after the manner of a yolk bag.

WASHINGTON, D. C.

Washington, D. C.

# The Rennel.

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FIXTURES.

BENCH SHOWS.

Sept. 22, 23, 24 and 25.—Dog Show of the Milwankee Exposition Association. John D. Olcott, Superintendent, Milwankee, Wis, Sept. 29, 30 and Oct. 1, 2.—Third Annual Dog Show of the Southern Ohio Fair Association. H. Anderson, Secretary, Dayton, Sept. 29, 30 and Oct. 1, —Twelfth Dog Show of the Western Pennsylvania Poultry Society, Pittsburgh, Pa. C. B. Elbert, Cort. 6, 7, 8 and 9.—Second Annual Dog Show of the Philadelphia Rennel Club, in conjunction with the Pennsylvania State Agricultural Society. E. Comfort, Secretary, Philadelphia, Pa. C. B. Elbert, Cott. 7, 8 and 9.—Second Annual Dog Show of the Danbury Agricultural Society. E. Comfort, Secretary, Philadelphia, Pa. Oct. 7, 8 and 9.—Pourth Annual Dog Show of the Danbury Agricultural Society. S. E. Hawley, Secretary, Danbury, Conn. Oct. 7, 8 and 9.—Dog Show of the York County Agricultural Society. R. S. Hicks, Secretary, Stafford Springs, Conn. FIELD TRIALS.

Nov. 9.—Second Annual Field Trials of the Fisher's Island Club, for members only. Max Wenzel, Secretary, Hoboken, N. J. Nov. 9.—First Annual Trials of the Western Field Trials Association, at Ablene, Kan. Entries close Oct. 15, A. A. Whipple, Secretary, Kansas City, Mo.

Nov. 16, 1885.—Seventh Annual Field Trials of the Eastern Field Trials Club, High Point, N. C. Entries for Derby close May 1. W. A. Coster, Secretary, Flatbush, L. I. Dec. 7.—Seventh Annual Field Trials of the National Field Trials Club, Grand Junction, Tenn. Entries for Derby close April 1. B. M. Stephenson, La Grange, Tenn., Secretary.

### A. K. R.-SPECIAL NOTICE.

THE AMERICAN KENNEL REGISTER, for the registration of pedigrees, etc. (with prize lists of all shows and trials), is published every month. Entries close on the 1st. Should be in early. Entry blanks sent on receipt of stamped and addressed envelope. Registration fee (50 cents) must accompany each entry. No entries inserted unless paid in advance. Yearly subscription \$1.50. Address "Americau Kennel Register," P. O. Box 2832, New York. Number of entries already printed 2588.

### THE AMERICAN KENNEL CLUB.

THE AMERICAN KENNEL CLUB.

Editor Forest and Stream;

Mr. Osborn is gallantly rushing into danger in his defense of the A. K. C. I have no doubt that he, in common with his many friends, believes that there is no pursuit at which he would not succeed better than the one of trying to make a fool of himself, or being made a fool of by others, but he miscalculates the enormous capacity of the present management of the A. K. C. to make fools of wise men. Solomon himself would fall if he entered and staid too long in those lists. Just look at it. How can an organization he respected or useful under a president who seemingly imagines that he is a legislature and judiciary as well as executive officer? Then, what respect can be left after the official head deliberately debauches the very organic life of the body, as Maj. Taylor did in "construction?"

Then again, Mr. Osborn uses a bad metaphor. This is no case for "ifghting." What soldier could fight a chorus of laughter and ridicule? No! No! The tirst and only thing to be done is to induce our president to step down and out. This is no time to be meally-mouthed, if we would save the present A. K. C. or keep the path open for another to rise on its ruins. I tell you, "fight" is not the word—"mutiny," "rebellion" or "high treason," call it as you will, is the only thing that will now save the A. K. C. I had a dream once. I dreamed that the Pooppoduck Club advertised that it would give premiums in money to winning exhibitors, and after the show laughed at them and said, "that was only in a Pickwichan sense." Then this variety of "disappointed exhibitor" applied to the A. K. C. for redress. The president gravely lectured the Pooppoducks on their conduct, when behold the chief Pooppoduck put his thumb to his nose, twirled his fingers in the air and whispered "construction." There was a tremendous smash, the sky was illumined with "A.," "K." and "C." in every conceivable combination, and I woke up to wonder why I would eat too much roast pig.

THE ENGLISH SETTER STANDARD.

## THE ENGLISH SETTER STANDARD.

THE ENGLISH SETTER STANDARD.

Editor Forest and Stream:
In reply to your invitation for opinion as to the advisibility of altering the present standard of English satters, I will say that sooner or later the present standard will be abolished, as has been illustrated with the advancement of all breeds. It can be likened to the standard of trotting horses of twenty years to those of the present. The former consisted more of the general form, while that of the latter has a tendency to combine the higher element of practical test in speed and form. In other words a sportsman would prefer to purchase an animal, whether horse or an English setter, comprising the combined points, viz.; practical qualities and general form. Were I to purchase a dog, common sense would dictate to give the preference to the practical qualities of a field trial dog combined with the qualities of a bench show dog, I should judge the standard of a dog by his demand and practical use. It is comparatively an easy matter at the present time to obtain a bench show winner, whereas it is apparently an utter impossibility to obtain a dog combining the field trial qualities of a Paul Gladstone with the bench show perfection of a Robert Le Diable. Such being the case, I am of the opinion that the present standard of English setters will not be going in arrears by advancing a few points in favor of the practical qualities of the field trial dog.

Cincinnati, O., Aug. 15.

Editor Forest and Stream:

The only two breeds of dogs the A. K. C. has any right to settle the standards of are the American foxhound and Chesapeake Bay retriever, two strictly distinctive American ones. Stonehenge is good enough for all the rest; when a better is required it may be relied upon it will be made on the other side. How ridiculous it is to attempt for instance to meddle with the greyhound. And tell me who knows a pure English harrier in this country? He is included for one of the committees to act upon.

HOMO.

PEDIGREE OF DAISY.—Newburyport, Mass.—Editor Forest and Stream; Can any of your readers give the breeding of the English setter bitch Daisy, owned by the late Barton E, Kingman, of Youkers, N. Yi—T. F.

THE IRISH WOLFHOUND.

[Prom the essay by Capt. C. A. Graham.—Concluded.]

A BOUT the year 1858 the writer took the Irish wolfdound any specimens of the breed. For something inquiries after with much success; but about twelve years ago three distinct strains were brought to his notice—wix, those of the late Sir. Jim. With much success; but about twelve years ago three distinct strains were brought to his notice—wix, those of the late Sir. Jim. With much success; but about twelve years ago three distinct strains were brought to his notice—wix, those of the late Sir. Jim. With the with the without the control of the control of the without the withou