THE MYSTERIES OF SCENT

Vagaries Which Hunters Cannot Explain.

EARLY HUNTING DAYS

Theories That Have Been Advanced. Good and Bad Scenting Days—How Hounds Lose and Recover the Trail. Fallen Leaves as a Help to the Hunted Fox.

If there is one thing more than another that has vexed the minds of sportsmen through countless centuries, it is the question of "scent" — that remarkable commodity which is so necessary to the success of the hunter. And yet even in this twentieth century, says the London Daily Mail, with all the accumulated knowledge of successive generations at our disposal, it is doubtful whether we know much more about the mysteries of scent than did Nimrod, who, so far as we know, was the mightiest hunter of early days.

As to Nimrod and his methods of hunting we are actually told but little for he is only referred to twice in all the writings of ancient days that are given to us, and no mention is made of his hounds. But we have records of one Marri—who is held by many old time writers to be one and the same as the mighty hunter of Genesis—and he certainly hunted with hounds, the latter being invariably mentioned with his name.

At that very remote period, therefore, the usefulness of the hound as a tracker of wild beasts had been recognized and doubtless everything was done then, as it is to this day, to encourage the natural instinct of the canine race in this particular with a view to aiding man in the chase. Yet after all these days there is not an M. F. H. in the land, or a huntsman either, who can tell you why it is that under precisely similar meteorological conditions hounds can run on a burning scent all day on the Monday, and can scarcely raise a whimper on the Tuesday, though the fox be but half a field ahead of thef.

Many theories have been advanced to explain the vagaries of scent, but none of them is entirely satisfactory. Some no doubt still pin their faith to the words of the poet who declared that

A southerly wind and a cloudy sky,
Proclaim a hunting morning.

But as a matter of fact neither the one nor the other will make scent "hang" if so be that Providence wills it otherwise. You cannot indeed lay down any hard and fast rule concerning so variable and intangible a thing as scent, which is generally at its best when you least expect it.

Country folk will frequently tell you that scent is never good during the fall of the leaf in autumn or, indeed until the fallen leaves have become rotten. The reason given in support of this argument is that the fox while running turns over the leaves as he goes along—accidentally of course!—and so conceals his tracks as it were, behind him.

It must be a careful fox that could accomplish this sleight of foot with any degree of accuracy and a poor nosed pack of hounds that come not own his scent through the shallow density of a withered leaf. But the yokel is quite right up to a certain point in his argument. Scent very often is at its worst during the leaf fall but the is because the smell of decaying leaves themselves is so pugent that it baffles the noses of the pack unless the fox carry a very pronounced odor of his own. Perhaps it is because, like the countryman, we sometimes forget side issues of this description that we are often puzzled by the mysteries of scent.

One point in particular in regard to scent seems impossible of solution. A fox slips away on one side of a covert while hounds are drawing on the other. Somebody sees him and shouts a view hallo! Along comes the huntsman at his best speed and lays on his hounds at the spot where the aforesaid person swears that the fox left the wood, but not a hound in the pack will own the line; never a whimper breaks in upon the expectant silence of the eager field. Cast after cast is made but to no purpose, and eventually the huntsman moves off to resume his draw, muttering to himself that he "don't believe there weren't no fox at all."

For all that, twenty minutes later, when hounds happen again to be passing that way toward the next covert, suddenly there is a whimper here and another there, and away they go like a pack possessed right across the field and through the very gap in yonder hedge that had been pointed out to the unbelieving huntsman. "Well, I never!" remarks that worthy, "and so old Mr. Stiggins was right after all."

Scent certainly at times hangs well in a high wind, just as certainly as on a very still day it will unaccountably disappear all of a sudden. But there are days when the wind is high and the ground wet, at which times there must be plenty of evaporation going on, but never a vestige of scent is to be discovered, although half a dozen foxes may leave covert before your very eyes.

People who have no sense can't do the best they can.

TRAINING WILD ANIMALS.

Acquaintance With One Another the First Step Taken.

In the beginning of the training of animals, it is first necessary to get them thoroughly acquainted with one another, which is done by placing a collar and chain on each individual intended for the group. This is not always a safe or pleasant task, as there are few animals, however tame, that do no' object to a collar. To accomplish this they are placed in a small cage, a rope passed over them, and they are then drawn up to the side of the cage, and held while the collar and chain is adjusted.

All felines use their claws as well as their teeth, thus the operation requires the utmost caution. The arena or training cage is next brought into play. In this the animals are placed one at a time, and secured in such a manner they cannot reach one another. There they are left for several days; during this time the trainer makes a careful study of each, taking note of his disposition and general traits of character. It often occurs that one will prove so sullen, morose and vicious he will in no wise affiliate with the other members, then a new one must be sought and the vicious one is doomed to a life behind the bars in some zoo or traveling menagerie.

The animals selected are usually as near of an age to one another as possible. After they have become thoroughly acquainted they are all removed except one, and the collar is taken off. The trainer enters the cage holding a chair in one hand, which is used as a shield in case the animal should suddenly spring upon him, and a stout whip in the other.

About the first lesson they are tau

About the first lesson they are taught is to mount a pedestal, which is hung upon the bars a short distance from the floor. If the animal is not too vicious and will allow himself to be approached, the trainer begins to caress and call him by name. This gives him to understand he is not an enemy but a friend, as nearly all animals fight only through fear.

After the animal fully understands what is required of him, and will mount the pedestal at the word of command, another member of the group is then introduced and taught in like manner. As each in turn has learned his first lesson, the pedestal is placed at different heights and all are taught to pass from one to the other, thus forming a pyramid. Jumping through hoops is taught by holding the hoop first very low, allowing the animal to merely step through. Once accustomed to this the hoop is raised a little at a time until the desired height is reached.

In teaching them to roll a ball, the ball is placed next to the bars, compelling the animal to pass over it. After he becomes used to this, the same as any other next object introduced, the whip is used by striking in front of the animal. He naturally stops and remains standing on the ball. The teaching of this trick requires many days of patience on the part of the trainer.

Training such a group is no child's play, few trainers seldom escape the unpleasant experience of being leaped upon in anger by some of their pupils. It therefore requires to make a successful trainer a man of powerful physique, cool nerves and unerring judgment. In order to understand just how far one animal can be driven without retaliating, it often becomes necessary when an animal's temper has been aroused to cease work for a time until he again becomes passive. Lack of knowledge along the line has often been the cause of trainers receiving serious injuries and in some cases actually killed.

The time usually required in training is from two to three months, much depending upon the intelligence of the animal, as some are much brighter than others. In case of the death of one of the animals, the great difficulty is in getting another to work in the group, as the others do not take kindly to a newcomer. It is often necessary to collar and chain them in the same manner as when all were strangers. They frequently attack and kill a newcomer if the greatest caution is not exercised.

When the animals are turned into the arena, ready for their act, they at once begin to play like so many frolicsome kittens, and mount the pedestal without being commanded to do so, which shows they are governed by kindness and not by fear.

Rat Attacks Man In Street

A strange incident has occurred at Crediton. While walking along the street, a man was alarmed by something springing at him from the roadway. He brushed his hand over his coat and a large rat fell to the ground.

The incident, however, did not end there for the rat made furtner attacks on the man, who experienced some difficulty in keeping it off. Several passersby came to his assistance, but it was some time before they were able to kill the rat.

So wild and unusual an attack in the open street was doubtless due to the rat having lost its way back to its haunt.

A curious instance of animal instinct and attachment in an otter is related by a Cork correspondent of the Feld. A few months ago in that city a man caught a live otter. Bringing the animal home, after some time, he succeeded in taming it, and trained it to fish.

MAKING SAINTS STATUES

An Industry Which Centres in One Quarter of Paris.

LARGE SALARIES PAID

High Prices Sometimes Paid for the Original Models—Copies Sent All Around the World—Russia a Heavy Buyer—How the Duplicates Are Made and Sold.

All the world knows that Paris is the world's art centre; but there is no more curious phase of it than the moulding of those gorgeous and often jewelled statues which one sees in Cartholic churches all the world over from London to Buenos Ayres and from New York to Sydney.

This craft is carried on around the old Church of Saint Sulpice, in the neighborhood of the Rue de Rennis and the Odeon. At one time the old religious statue was a very costly luxury, and only the wealthy could afford to place such works of art in the churches. Nowadays it is different for thanks to mechanical progress any number of copies of a costly original may be made, so that the humblest church may buy a statue of its patron saint.

Perhaps the greatest dealer in all Paris is Pacheu, himself a practical artist and perhaps the greatest authority on hagiology alive. Such a man is wealthy enough to commission Auguste Rodin himself to execute a statue of angel or saint at a figure running into tens of thousands of dollars. The right to reproduce in any size and material is bought from the artist.

In some cases the sculptor will merely design a statue on paper and Pacheu's own staff will execute it in stone, plaster or wood. Some of the artists on the manufacturer's staff, by the way, draw salaries up to $7,000 a year.

Last, but not least, it must be borne in mind that in spite of this duplication the original statue retains at least some of its value as a work of art. Pacheu and two or three of the other large dealers in these quaint objects sustain severe losses occasionally by following their own judgment in the matter of buying and then finding that their purchase fails to find favor.

There is a good deal of secrecy about the business, especially in the matter of the composition of the modelling plaster. The ingredients of this material are known only to the principal of the house, and after it has been boiled, pounded and stained it is thinned down, according to the degree of fluidity which the modeller requires.

The first thing, of course, is to obtain a mould in two parts, from which any number of copies may afterward be cast. In the case of a life size statue a mould is obtained in two parts—a bon cheux or a la gelatine. In order to produce a mould by the first named method the original is entirely covered with little bits of plaster four or five centimeters thick, thus constituting the mould.

The dimensions and form of the pieces vary with the lines of the model, and to prevent these falling apart the artist uses an outer envelope of plaster. When this is thoroughly set the whole is divided down the middle and back and the mould is then ready for use, faithful in every detail.

But even after the mould has been secured in this way there is a good deal to be done, for the copy is covered with plaster ridges where there are joinings in the mould. These imperfections must be removed by another artist.

To model a la gelatine the artist first makes an outer casing of plaster, then suspends the original statue upside down and puts the casing in such a position as almost to touch the sides of the model. The narrow space in between is then filled in with liquid gelatine, which when hard produces a perfect mould.

Even when the replica comes forth, from the mould and its glaring imperfections are softened down much remains to be done. It must be colored, gilded or equipped in accordance with the ideas of a parish priest in Andalusia or southern Chile.

Russia is one of Pacheu's largest customers, and every year he sells hundreds of thousands of gayly jewelled ikons to orthodox churches all over the empire, from the German frontier to eastern Siberia. And often enough, when the statue reaches a rich Siberian town like Irkutsk or Tobolsk, the plaster crown will be removed and one of pure gold substituted, set with magnificent uncut diamonds and emeralds.

The Norwegian postal authorities have under consideration an application from a firm which wishes to print its advertisement on the back of postage stamps. It suggests that the money derived from this source be used to build a sanitarium for consumptives.

When a woman marries a man for money the job is worth all she gets for it.

The bread of independence is often distressingly shy of butter.

DESERT MINERS' ETIQUETTE

Never Ask Where Man's Claims or Secret Water Holes Are.

"Never ask a man anything about his mine; he won't tell you if you do; it isn't etiquette to ask such questions on the desert."

Thus spoke J. Heineman, late of Beatty, an old timer in Death Valley and the desert.

"You see, when one miner meets another on the desert they stop, talk and pass pleasantries. One will ask the other how he's getting along and he will say 'good' or 'hard luck,' but that's about all. Neither asks for details or where the other has his claims located. If any man wants you to know he'll tell you without being asked. If not he won't tell you if you do ask.

"The fact is that if a man has a great body of low grade ore that he must have a force of men to work and ship to the smelters he must record it. But if he has a rich spot with free gold easily handled it is not necessary, and many times one doesn't care to have the world know about it and have everybody coming to dig all around. It often leads to troubles and litigation, jumping and all that sort of thing.

"If a property is in the mountains it is more necessary to record it for it is easier found. A man can be followed in the mountains, but never out on the desert. I would like to see the man who could follow me on the desert if I don't want him to. I'll give him a chase that will make him very sick of his job. Of course in such cases a claim is never left unguarded if any one should come stumble upon it by accident. In such cases possession will be nine points of the law.

"This is so not only about mines, but also about private secret water holes. You know some of these give so little water that once known to the general public they would be of no use to those who went to big trouble finding them or to any one else very soon, so they never tell. Let one who has such a place hidden find one in need he will share his water, and, if necessary he will go and bring back a supply, but the other fellow doesn't know where it comes from. That's the finder's secret.

"Of course there are public watering places, especially along the stage routes. Some of the wells have been dub by individuals or companies who sell water. Lots of money has been expended in this way. The water problem is indeed a serious one on the desert.

"At some of the camps water is hauled by team and sells for as high as $9 a barrel. People who don't know think that is a terrible price, but it really leaves a very small profit for the long haul and the time lost and feed of teams. Often much of the water with which one starts is used up by the horses."

Early Silhouettes.

The first American photographer was the silhouettist, and the early American went to him for their portraiture much as the modern American sits before the camera today. The earliest extant type of silhouette was found upon the Egyptian mummy cases and Etruscan pottery.

It passed down the generations until Mme. Pompadour had her profile made in black upon a white ground by simply casting a shadow with a lamp. Then, according to the Journal of American History, it immediately became the fashion throughout France to have one's profile a la Pompadour.

It was about this time that Etienne de Silhouette, Financial Minister of Louis XV., inaugurated his rigid system of economy which came so near to parsimony that his name was used as an appellation for everything cheap or shabby. The plain black profiles were so inexpensive and so common among all classes of people that the ronized Peale, one of the most famdain: "It's too Silhouette."

The first silhouettist to begin business in America was Charles Wilson Peale in Philadelphia, more than a century ago, and here American society gathered to sit for portraits. The distinguished men of the day also patronized Peale one of the most famous of his silhouettes being that of George Washington.

One of the most noted silhouettists to come to America was James Hubard, an English youth of seventeen, who landed in New York under special management a few days after the arrival of Lafayette in 1824. He travelled about the country exhibiting his Hubard Gallery in which 50 cents the visitor was "entitled to see the exhibition, hear the concert and obtain a correct likeness by Master Hubard, cut with common scissors in a few seconds without the aid of drawing or machine."

So lucrative seemed the new profession that many men entered it, not only profiting financially but also makeing the acquaintance of exclusive families of the period. One of these was William Henry Brown. So adept did he become that, so it is said, with a single glance of the eye he could photograph on his memory a profile and figure and reproduce it months or even years afterward with absolute accuracy.

Brown accumulated money rapidly and spent it lavishly. At the close of his career he left a remarkable collection of silhouttes of many distinguished Americans.

Responsibility often finds people too slippery to perch upon.

AILMENTS OF WORKERS

Maladies Peculiar to Certain Forms of Trade.

NUMBER IS INCREASING

They Range From Bends to Writer's Cramp—Ship Engineers, Preachers, Stonecutters, Weavers, All Subject to Maladies Caused by Their Occupation.

Last year, probably 500 men in America and Europe died of the bends. And what is that? Simply a malady caused by breathing air at high pressure.

In building tunnels and excavating for piers it is necessary to send men down into caissons in which the air, instead of being at its ordinary pressure of 15 pounds to the square inch, is at 50 or 100 pounds. Few men can stand this pressure long and even those that can ordinarily suffer alarming after effects. Coming out into the open air again their ankles and knees swell, they vomit and there are agonizing pains in their heads. Sometimes they sink into a comatose state and die.

Fortunately modern medicine tries to keep pace with modern maladies, and so it is usually possible to cure this disease. It is due as a rule to the fact that the transition from the outer air to the caisson, or vice versa, is made too rapidly.

The man who topples over in agony after leaving a caisson is sent back and the pressure is reduced very slowly. In Europe, the tunel and bridge builders maintain special chambers for this purpose. As a result the mortality in bends has been reduced to 1 per cent.

Unfortunately there are other occupation diseases which present greater difficulties. Some of them in truth may be cured only by the patient abandoning his trade.

One of these is chalacosis, which is a malady of the lung. It is caused by breathing great quantities of stone dust.

You have often observed no doubt, that when a marble or stone building nears completion men go all over its surface with sandblasts, cleaning and smoothing the stone. Well, these blasts send up a cloud of finely powdered stone and the workmen are forced to breathe it.

At first their bronchial tubes make a brave effort to expel the dust and they cough a great deal. But by and by the little scavengers in the vestibules of the lungs are overcome and the minute particles of stone begin to invade the lungs themselves. The result is chalacosis, which is a form of pneumonokoniosis, which means a scarlike overgrowth of lung tissues.

Wind instrument players suffer from a malady called emphysema. The small air passaiges in their lungs are inflated so much and so often that the surrounding cells are mashed flat.

Workers in chemicals are subject to all sorts of unusual affections. Those who take part in the manufacture of rubber for example, are often badly injured by the capers of sulphide of carbon—an exceedingly ill smelling liquid used to dissolve the elastic gum. These vapors cause headaches, neuralgia, a staggering gait and violent bodily pains, followed sometimes by delirium and mania.

Weaver's tonsilitis is a malady frequently met with among the employees of cotton mills, due to the presence of minute fibres of cotton in the crypts of tonsils.

These tonsils cause a chronic irritation and the way is thus opened for the entrance of stray germs. The malady yields to the treatment indicated for ordinary tonsilitis.

Tea tasters, despite the fact that they seldom if ever swallow any of the tea they taste, commonly suffer derangements of various bodily functions. The poison in this case is the very powerful alkaloid to which tea owes its soothing virtues.

It is a commonplace of observation that the excessive use of any one group of muscles leads to a sort of local paralysis. This malady was formerly very familiar in the form of what was called writer's cramp.

It was thought that the triumph of the typewriting machine over the old fashioned pen would cause it to disappear from the earth, but it is now in full bloom as typewriter's cramp. Similar neuroses afflict telegraphers, violinists, piano players, cigarette makers and milkmaids.

Another form of this serious and troublesome disease incapacitates marine engineers. These men usually spend all their time, awake and asleep, within a few feet of their beloved engines.

The constant vibration overworks certain of their muscles—particularly those of the legs—and the result is a good deal of pain. Sometimes this pain extends up the back and has distressing consequences. At a rule it is relieved by a few days ashore.

Workers in ship engine rooms also suffer from breathing hot, vitiated air and from contant stooping. Spasms, rigidity of certain muscles and various neuralgias and hysterical symptoms are sometimes encountered in such men.

Pure obstinacy often looks like courage.