CAMP FIRE YARN NO. 13

READING "SIGNS", OR DEDUCTION

Putting This and That Together
Instances of Deduction
Sherlock-Holmesism

HINTS TO INSTRUCTORS

Instruction in the art of observation and deduction is difficult to lay down in black and white. It must be taught by practice. One can only give a few instances and hints, the rest depends upon your own powers of imagination and local circumstances.

The importance of the power of observation and deduction to the young citizen is great. Children are proverbially quick in observation, but it dies out as they grow older, largely because first experiences catch their attention, which they fail to do on repetition.

OBSERVATION is, in fact, a habit to which a boy has to be trained. TRACKING is an interesting step towards gaining it. DEDUCTION is the art of subsequently reasoning out and extracting the meaning from the points observed.

When once observation and deduction have been made habitual in the boy, a great step in the development of "character" has been gained.

The importance of tracking and tracking games as part of a Scout's training cannot be overestimated. It is not so difficult as many people imagine. More tracking out-of-doors and yarns on tracks and tracking in the Troop room should be encouraged in all Scout Troops.

WHEN A SCOUT HAS LEARNED to notice "signs", he must then learn to "put this and that together", and so read a meaning from what he has seen. This is called "deduction".

Here is an example which shows how the young Scout can read the meaning from "signs", when he has been trained to it.

Old Blenkinsop rushed out of his little store near the African Kaffir village.

"Hi! Stop thief!" he shouted. "He's stolen my sugar. Stop him!"

Stop whom? There was nobody in sight running away.

“Who stole it?” asked the policeman.

“I don’t know, but a whole bag of sugar is missing. It was there only a few minutes ago.”

A native police tracker was called in—and it looked a pretty impossible job for him to single out the tracks of the thief from among dozens of other naked footprints about the store. However, he presently started off hopefully at a jog-trot, away out into the bush. In some places he went over hard stony ground but he never checked his pace, although no footmarks could be seen.

At length the tracker suddenly stopped and cast around, having evidently lost the trail. Then a grin came on his face as he pointed with his thumb over his shoulder up the tree near which he was standing. There, concealed among the branches, they saw a native with the missing bag of sugar.

How had the tracker spotted him? His sharp eyes had seen some grains of sugar sparkling in the dust. The bag leaked, leaving a very slight trail of these grains. He followed that trail and when it came to an end in the bush the tracker noticed a string of ants going up a tree. They were after the sugar, and so was he, and between them they brought about the capture of the thief.

I expect that Old Blenkinsop patted the tracker on the back for his cleverness in using his eyes to see the grains of sugar and the ants, and in using his wits to see why the ants were climbing the tree.

The Lost Soldier

A cavalry soldier was lost in India, and some of his comrades were hunting all over to find him. They came across a native boy and asked him if he had seen the lost man. He immediately said: “Do you mean a very tall soldier, riding a roan horse that was slightly lame?”

They said, “Yes, that was the man. Where did you see him?”

The boy replied, “I have not seen him, but I know where he has gone.”

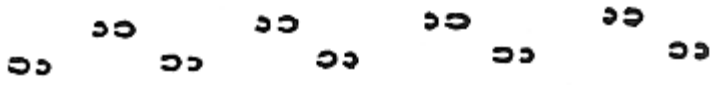
Thereupon they arrested him, thinking that probably the man had been murdered and made away with, and that the boy had heard about it.

But eventually he explained that he had seen tracks of the man.

He pointed out the tracks to them, and finally brought them to a place where the signs showed that the man had made a halt. Here the horse had rubbed itself against a tree, and had left some of its hairs sticking to the bark, which showed that it was a roan (speckled) horse. Its hoof marks showed that it was lame, that is, one foot was not so deeply imprinted on the ground and did not take so long a pace as the other feet. That the rider was a soldier was shown by the track of his boot, which was an army boot.

Then they asked the boy, “How could you tell that he was a tall man?” and the boy pointed out to where the soldier had broken a branch from the tree, which would have been out of reach of a man of ordinary height.

Deduction is exactly like reading a book.



A lame horse made these tracks. The question is: Which leg is he lame in? The long feet are the hind feet.

A boy who has never been taught to read, and who sees you reading from a book, would ask, "How do you do it?" You would point out to him that a number of small signs on a page are letters. These letters when grouped form words. And words form sentences, and sentences give information.

Similarly, a trained Scout will see little signs and tracks. He puts them together in his mind and quickly reads a meaning from them which an untrained man would never arrive at.

From frequent practice he gets to read the meaning at a glance, just as you do a book, without the delay of spelling out each word, letter by letter.

Instances of Deduction

I was one day, during the Matabele War in Africa out scouting with a native over a wide grassy plain near the Matoppo Hills.

Suddenly we crossed a track freshly made in grass, where the blades of grass were still green and damp, though pressed down—all were bending one way, which showed the direction in which the people had been travelling. Following up the track for a bit it got on to a patch of sand, and we then saw that it was the spoor of several women (small feet with straight edge, and short steps) and boys (small feet, curved edge, and longer steps), walking, not running, towards the hills, about five miles away, where we believed the enemy was hiding.

Then we saw a leaf lying about ten yards off the track. There were no trees for miles, but we knew that trees having this kind of leaf grew at a village fifteen miles away, in the direction from which the footmarks were coming. It seemed likely therefore that the women had come from that village, bringing the leaf with them, and had gone to the hills.

On picking up the Leaf we found it was damp, and smelled of native beer. The short steps showed that the women were carrying loads. So we guessed that according to the custom they had been carrying pots of native beer on their heads, with the mouths of the pots stopped up with bunches of leaves. One of these leaves had fallen out; and since we found it ten yards off the track, it showed that at the time it fell a wind was blowing. There was no wind now, that is, at seven o'clock, but there had been some about five o'clock.

So we guessed from all these little signs that a party of women and boys had brought beer during the night from the village fifteen miles away, and had taken it to the enemy in the hills, arriving there soon after six o'clock.

A single leaf that had blown off a pot carried by a native African woman made it possible to secure information about the enemy.

The men would probably start to drink the beer at once (as it goes sour in a few hours), and would, by the time we could get there, be getting sleepy and keeping a bad look-out, so we should have a favourable chance of looking at their position.

We accordingly followed the women's tracks, found the enemy, made our observations, and got away with our information without any difficulty.

And it was chiefly done on the evidence of that one leaf. So you see the importance of noticing even a little thing like that.

Dust Helping in Deduction

By noticing very small signs detectives have discovered crimes.

In one case a crime had been committed, and a stranger's coat was found which gave no clue to the owner.

The coat was put into a stout bag, and beaten with a stick. The dust was collected from the bag, and examined under a powerful magnifying glass, and was found to consist of fine sawdust, which showed that the owner of the coat was probably a carpenter, or sawyer, or joiner. The dust was then put under a more powerful magnifying glass—called a microscope—and it was then seen that it also contained some tiny grains of gelatine and powdered glue. These things are not used by carpenters or sawyers, so the coat was shown to belong to a joiner, and the police got on the track of the criminal.

Dust out of pockets, or in the recesses of a pocket-knife, and so on, tells a great deal, if closely examined.

Sherlock Holmesism

Dr. Bell of Edinburgh is said to be the original from whom Sir Conan Doyle drew his idea of Sherlock Holmes.

The doctor was once teaching a class of medical students at a hospital how to treat people. A patient was brought in, so that the doctor might show how an injured man should be cared for. The patient in this case came limping in, and the doctor turned to one of the students and asked him:

"What is the matter with this man?"

The student replied, "I don't know, sir. I haven't asked him."

The doctor said: "Well, there is no need to ask him, you should see for yourself—he has injured his right knee—he is limping on that leg. He injured it by burning it in the fire— you see how his trouser is burnt away at the knee. This is Monday morning. Yesterday was fine, Saturday was wet and muddy. The man's trousers are muddy all over. He had a fall in the mud on Saturday night."

Then he turned to the man and said: "You drew your wages on Saturday and got drunk, and in trying to get your clothes dry by the fire when you got home, you fell on the fire and burnt your knee—isn't that so?"

"Yes, sir," replied the man.

I saw a case in the paper once where a judge at the county court used his powers of "noticing little things," and "putting this and that together." He was trying a man as a debtor.

The man pleaded that he was out of work, and could get no employment.

The judge said: "Then what are you doing with that pencil behind you ear if you are not in business?"

The man had to admit that he had been helping his wife in her business, which, it turned out, was a very profitable one. The judge thereupon ordered him to pay his debt.

True Scouting Stories

Captain Stigand in *Scouting and Reconnaissance in Savage Countries* gives the following instances of scouts reading important meanings from small signs.

When he was going round outside his camp one morning, he noticed fresh spoor of a horse which had been walking. He knew that all his horses went at a jog-trot only, so it must have been a stranger's horse. He realized that a mounted enemy scout had been quietly looking at his camp in the night.

Coming to a village in Central Africa from which the inhabitants had fled, Stigand could not tell what tribe it belonged to till he found a crocodile's foot in one of the huts. This showed that the village belonged to the Awisa tribe, as they eat crocodiles, and the neighbouring tribes do not.

A man was seen riding a camel over half a mile away.

A native who was watching him said, "It is a man of slave blood."

"How can you tell at this distance?"

"Because he is swinging his leg. A true Arab rides with his Legs close to the camel's side."

The footmarks of different camels look very much alike. But Egyptian trackers are trained to follow them and track down stolen camels.

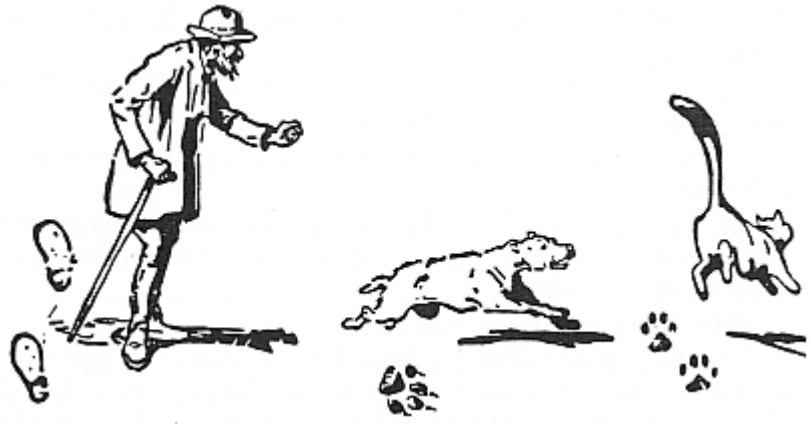
Finding Lost Property

An officer lost his field-glasses during some manoeuvres on the desert five miles from Cairo, and he sent for native trackers to look for them.

The horse was brought out and led about, so that the trackers could study its footprints. These they carried in their minds, and went out to where the manoeuvres had been. There, among the hundreds of hoof marks of the cavalry and artillery, the trackers soon found those of the officer's horse, and followed them up wherever he had ridden, till they found the field-glasses lying where they had dropped out of their case on the desert.

The "Lost" Camel

Egyptian trackers are particularly good at spooring camels. To anyone not accustomed to them, the footmarks of one camel look very like those of any other camel. But to a trained eye they are all as different as people's faces, and the native trackers remember them very much as you would remember the faces of people you have seen.



The tracks right outside your door may have a story to tell if you can read them. These tracks are from a simple story of a dog chasing a cat, and its owner's anger.

Some years ago a camel was stolen near Cairo. The police tracker was sent for and shown its spoor. He followed it for a long way until it got into some streets, where it was entirely lost among other footmarks.

A year later the same police tracker suddenly came on the fresh track of this camel—he had remembered its appearance all that time. It had evidently been driven with another camel whose track he also recognized. He knew they were made by a camel which belonged to a well-known camel thief. So, without trying to follow the tracks through the city, the tracker went with a policeman straight to the man's stable, and there found the long-missing camel.

South American Trackers

The "Gauchos," or native cowboys, of South America are fine scouts. The cattle lands are now for the most part enclosed. but formerly the gauchos had to track stolen and lost beasts for miles and were therefore good trackers. One of these men was once sent to track a stolen horse, but failed to find it. Then months later, in a different part of the country, he suddenly noticed the fresh spoor of this horse on the ground. He at once followed it up and recovered the horse.

Example of Practice in Deduction

A simple deduction from signs noticed in my walk one morning on a stormy mountain path in Kashmir.

Signs Observed—Tree-stump, about three feet high, by the path. A stone about the size of a cocoanut lying near it, to which were sticking some bits of bruised walnut rind, dried up. Some walnut rind also lying on the stump. Farther along the path, thirty yards to the south of the stump, were lying bits of walnut shell of four walnuts. Close by was a high sloping rock, alongside the path. The only walnut tree in sight was 150 yards north of the stump.

At the foot of the stump was a cake of hardened mud which showed the impression of a grass shoe.

What would you make out from those signs? My solution of it was this:

A man had gone southward on a long journey along the path two days ago carrying a load and had rested at the rock while he ate walnuts.

My deductions were these:

It was a man carrying a load, because carriers when they want to rest do not sit down, but rest their load against a sloping rock and lean back. Had he had no load, he would probably have sat down on the stump, but he preferred to go thirty yards farther to where the rock was. Women do not carry loads there, so it was a man. He broke the shells of his walnuts on the tree-stump with the stone, having brought them from the tree 150 yards north—so he was travelling south. He was on a long journey, as he was wearing shoes, and not going barefooted, as he would be if only strolling near his home. Three days ago there was rain, the cake of mud had been picked up while the ground was still wet—but it had not been since rained upon, and was now dry. The walnut rind was also dry, and confirmed the time that had elapsed.

There is no important story attached to this, but it is just an example of everyday practice which should be carried out by Scouts.

PATROL PRACTICES IN DEDUCTION

Read aloud a story in which a good amount of observation of details occurs, with consequent deductions, such as in either the Memoirs or the Adventures of Sherlock Holmes. Then question the boys as to which details suggested certain solutions, to see that they really have grasped the method.

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Make tracks on soft ground of different incidents—such as a cyclist meeting a boy on foot, getting off his bicycle to talk to his friend, then setting out again. Let the boys study the tracks and deduce their meaning.

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Place on a tray a collection of articles which might come from a man's pockets. Ask the Scouts to deduce what kind of man he was, his interests, etc.

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GAMES IN DEDUCTION

Strangers

Get some people who are strangers to the boys to come along as passers-by in the street or road, and let the boys separately notice all about them. After an interval ask each boy for a full description of the passers-by as to appearance, peculiar recognizable points, and what he guesses their business to be.

Or let each boy have two minutes' conversation with some stranger, and try to find out what he can about him in that time by questioning and observation.

"Crime" Deduction—Detective

Set a room or prepare a piece of ground with small signs, tracks, etc. Read aloud the story of a crime up to the point when the signs are made and let each boy in turn examine the scene for a given time, and then privately give his solution of it.

The very simplest schemes should be given at first. They can gradually be elaborated.

For instance, have a number of footmarks and used matches by a tree, showing where a man had difficulty in lighting his pipe, etc.

For a more finished theme take a mystery like that in Memoirs of Sherlock Holmes called "The Resident Patient". Set a room to represent the patient's room where he was found hanging, with footprints of muddy boots on the carpet, cigar ends bitten or cut in the fireplace, cigar ashes, screw-driver and screws, etc. Put down a strip of newspapers for "stepping stones" on which competitors shall walk (so as not to confuse existing tracks). Let each Scout (or Patrol) come in separately and give him three minutes in which to investigate. Then give him half an hour to make up his solution, written or verbal.

"Track the Assassin"

The assassin escapes after having "stabbed his victim", carrying in his hand the "dripping dagger". The remainder, a minute later, start out to track him by the "drops of blood" (represented by confetti) which fall at every third step. His confederate (the umpire) tells him beforehand where to make for. If he gets there without being touched by his pursuers, over eight minutes ahead of them, he wins.