A report from the Deputy Assistant Director of Pathology, Major F. Casement, D.S.O., showed that the tumour had the usual characteristics of a growth of this nature.

I am indebted to Corporal J. F. Barnard, R.A.M.C., for his excellent radiograms which accompany the notes on this case.

Fig. 5.

**Sport.**

**THE RED BEAR OF KASHMIR.**

By **LIEUTENANT-COLONEL R. H. L. CORDNER.**

Royal Army Medical Corps.

During the month of April, all over India, our thoughts turn to the leave season, and plans are made on all sides how best to spend the sixty days or, if one is very lucky, ninety days' leave. A few plan trips home; others turn their thoughts to the social centres—Simla, Murree, or Mussoorie, there to continue the round of tennis and dancing they have so often stated bored them to tears. Perhaps in many such cases it is the hand of the memsahib driving!

I planned a circular trip, extending over two and a half months, in
The Red Bear of Kashmir

searching for red bear. I am told that these bear used to be found quite close down in the Kashmir Valley, but yearly are withdrawing further and further back into the mountains, and are now seldom seen until many marches have been made into their lonely haunts.

My idea was to start from Srinagar and march over the Zogihar Pass, through Dras, and branch off and explore the Shiga-Shunga Valley and the Lesser Deosi Plateau. Here, my shikari had informed me, red bear and ibex were as plentiful as mulberries in the plains. Arriving at Srinagar, a few days were spent in collecting supplies and stores, examining tents, and buying odds and ends. The shikari went forward to collect porters at the mouth of the Wangat Nullah, where I would meet him coming by boat with the stores, and so save a couple of marches. Everything turned out according to plan, and on arrival I found a weird collection of Balti porters muffled up in their bundle of old bed-clothes and skins, tied together with bits of rope and string. In spite of the mass of clothes they wear they appear to suffer no discomfort either in the heat of the Kashmir Plains or in the cold of the snow-covered passes. The loads they can carry are wonderful, but there is an official limit when working for the sahib.

This is often disregarded, and an extra few annas at the end of the journey seem amply to repay the bearer. The loads are laid out and the shikari and I pick the bearers. The line is now ordered to load up. At once a general wail goes up from every throat. They all call on the sahib and heaven to witness that their load is at least three times the maximum weight! A little chaff, and a few words of surprise that a man as big as an elephant should complain about such a small load, restore order and good humour, and the loads are lifted, roped on, and away the line trudges, each man bent double and supporting himself heavily on his stick to show the sahib how overweighted he is. In reality the load is about a third of what the same man will carry when doing contract work. The sahib, shikari with rifle and camera, and tiffin coolie, go in front. The bearer brings up the rear to see that nothing is left, and away we file by the banks of the river.

Along the route there are recognized camping grounds. On the more frequented roads dāk bungalows are established, where a khansamah will provide food and refreshments. The more distant ones are less elaborate and only provide shelter, the traveller bringing all his own supplies. Further on, the camp is merely a piece of ground recognized by custom as the end of the march. It is just as well to avoid this and camp either a little before arriving at it or a short distance beyond. You have the advantage of getting on clean ground. For some reason the porters hate this arrangement. They are creatures of custom. A few marches more and we camp where and as we will, and are able to find suitable ground. We have passed the limits of camping grounds.

Day by day, on we march, the track becomes steeper and rougher, and one day the first snow is reached. It is curious with what pleasure one
always regards this first patch of snow. You invariably walk in it, prod it
with your khud-stick, and feel that you are at last getting on.

Later on, when wading knee-deep through it, helping to make a way for
the loaded porters, somehow one begins to regard it in a different light.
We arrived eventually at Dras, and put up for a day or so at the dâk
bungalow. This is the last bungalow to be seen for some time, as the way
is now off the beaten track and enters the shooting grounds. Here porters
are changed. The old lot are lined up, and I pass down the line handing
to each from a bag his exact pay. This completed, I stand aside. There
is a look of deep depression on all. I start again and put another two or
three annas in each palm. The whole line break into loud thanks for my
generosity! It amounts to less than a farthing a day! The next batch
of porters will take me on as far as Coxa, and here a fresh lot must be
obtained to accompany me to the Deosi, where I hope to camp and shoot
in real earnest.

The march is along the river most of the way, and it is always worth
remembering that where there is water there are always fish, and fish
greatly add to one's camp supply. Always take a rod and a few hooks.
The bait may be "atta" or, better still, "keera." Look out for a marshy
bit of land near the river. Turn over a few stones, under each will be a
little tube of sticks and sand, and in each tube a caddis fly grub. A couple
of these on a hook and you are assured of a fish for dinner. Always carry
a rod wherever you go. You will never regret it. It is always amusing
to see the blank astonishment of the local inhabitants at your success; they
examine the rod with interest. The fine line always excites their admira­
tion. They are always anxious to copy your methods, but to do so requires
similar tackle. Yours is the only supply in the district, so, watch it care­
fully. The native often considers the result justifies the means.

We had to remain a couple of days at this large village by Coxa to
collect coolies, some of whom came from a distance. I purchased also a
small stock of flour. These villages have only a small surplus margin of
supplies, and they are not as a rule eager to sell. In the winter there can
be little between them and starvation, should they under-estimate their
consumption.

Towards the afternoon the shikari spotted some ibex on the mountains
above us, and the villagers said they were always there, and remained
during the night on the hillside. There were two quite nice heads, so we
decided to do a stalk. The wind was blowing down towards the foot-hills,
but would probably change later on. The dry bed of the nullah was
selected; we intended to go up this until near to the herd, and to start the
stalk according to the wind. The climb became steeper and steeper, until
in the end it was a scramble up almost sheer rock. The shikari went in
front, got a foothold, and then threw his puggari end to me. With the
aid of this I would scramble up beside him. The village lay below. As
one climbed up it seemed to become smaller and smaller, with the people
like little ants. I could not help thinking in what a nasty mess one would arrive down there if one's foot slipped.

After a long climb we at last arrived at the group of rocks beyond which the herd of ibex had been located. The shikari removed his puggari and cautiously peeped over. He glanced round, turned and shook his head. The game was up! I stood up, gazed at the vacant nullah, and vowed I would never stalk another ibex though the shikari assured me they had horns trailing on the ground behind them. This resolution was kept until, aligning my glasses along the shikari's pointing finger, once more a pair of those glorious curved horns came into focus. Then a similar climb, a similar result, and an identical resolution! The way of the ibex hunter is very hard. Our porters collected and all arrangements complete, we continued our march up the nullah. The shikaris ranged far and wide on the flank, looking out for signs of bear and ibex, although I gave them to understand that my enthusiasm for the latter was at zero.

One afternoon, while sitting out on the watch after getting into the camp, the shikari suddenly pointed, and getting out the glasses, I saw a magnificent bear grubbing along on the opposite side of the river, and about a mile away. The game had been located, but between us rolled a snow-fed river. A council of war was held. The locals suggested crossing at a ford about a day's march ahead. The river was high, and they were doubtful about the possibility. The alternative was to go back four marches and cross by a rope bridge. About the latter the men were not enthusiastic. No one had crossed that year, and the bridge would not be in the best of repair after the winter storms. We decided on the former course, and set off early next morning. On arrival three men joining hands attempted the ford, and after a struggle got across. They came back shivering and breathless, and said the ford could only be attempted by unloaded coolies, and not at all by the sahib. On this point I had quite made up my mind, so our agreement was mutual.

The alternative must now be tried, viz., a march back to the rope bridge and a return march up the other side. It was necessary, too, to act quickly, as somehow in that mysterious native way the coolies heard that there was a sahib encamped at the mouth of the nullah. If he first crossed the bridge, the nullah and the bear would be his. Four of the best coolies were picked, the lightest of kit packed, and a bivouac tent and two blankets for myself and a blanket for each coolie. “Atta” for the men and four tins of Maconochie rations, jam, biscuits, tea and sugar for myself. All was soon prepared, and we started on our long march to the bridge and back to where we had seen the bear.

It must be remembered that a day's march in the mountains simply means the distance a heavily-loaded man can go in a day. The actual mileage is of little account. The difficulty of the march is the chief consideration. Shortly after starting the porters spotted some ponies—half wild animals, grazing on the hillside. This suggested riding. I quite
agreed. A stalk was started, and soon six ponies were captured. The men settled themselves and their packs on their mounts. Three in the front, myself, then the shikari and a coolie behind. I had expected a quiet walk along the tiny track on the hillside. Not so the coolies. A few yells, the ponies were banged with khud-sticks, and away we went at a fast trot, and sometimes at a gallop. Round corners, down into snow-filled hollows, and across shingle slopes. A slip would have sent the man and pony down hundreds of feet into the river below. Anyone wishing to practise this sort of ride should borrow a horse, get it on the roof of a house and trot round the gutter. Although dangerous, the pace was certainly faster than one could possibly have made on foot. A pause was made for refreshments and breath. The coolies proceeded to smoke. One man went round and collected a donation of tobacco from each. A piece of ground was selected, and he thrust his thumb into the earth up to the joint. A strong stem of grass was then pushed into the earth in a downward direction for a distance of six or seven inches to meet the tip of the buried thumb. The pipe was complete. The bowl was filled with the contributions of tobacco, lighted, and each man, kneeling down, placed the corner of his puggari over the "mouth-piece" and drew a few whiffs. He then retired to gasp and cough while another took his place. The pipe having been finished, the ride was resumed.

Towards evening the men paused. We were now near a little village, and they thought it would save unnecessary discussion with the villagers if we arrived on foot and not on horseback.

We dismounted. A few bangs with the ever-useful khud-stick and a few well-aimed stones rewarded our mounts and directed them back along the path we had come. It was getting quite dark when we arrived at the bridge. A scout returning informed us that the sahib was camped at the bridge itself. We decided to lie up for a few hours until the camp was asleep, and then slip across.

We bid ourselves away amongst the rocks in the nullah, and tried to get as much rest as possible. It would not do to light a fire, so I had a couple of biscuits and a drink from the stream and tried to sleep. At earliest daybreak the shikari roused us, and we silently filed past the camp and arrived at the bridge in the dim light. Horribly frail and tattered it looked, hanging loosely across the torrent.

A Kashmir rope bridge consists of three ropes made from twisted willow twigs and grass. One is the foot-rope, and the other two are hand-rails. The latter are connected at intervals to the foot rope by sticks, which help to steady the whole structure. Many of these side supports had fallen away, and the whole thing looked as if it would fall to bits at any moment. I most earnestly wished it had done so long ago. Still there was no help for it. The lightest coolie was already on the way. He crossed in safety, and I followed. The shikari warned me to walk lightly and with the greatest care; the advice was quite unnecessary, a cat could not have
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walked more lightly. At one point one of the sticks slid out of the rope and vanished into the stream forty or fifty feet below. It gave me a nasty feeling inside. At last it was over and I stood on the other side. One by one the others crossed and the party was reunited.

The shikari came and told me the bridge was in a very bad condition, and if the other sahib tried to cross it might only result in a regrettable accident. I agreed. A few blows with the little axe carried by every Kashmiri and our end of the bridge slid down the bank, rapidly uncoiled, and vanished in a welter of grass and sticks.

Again the march started, and about 10 or 11 a.m., feeling dead beat, I arrived in the nullah in which we had seen the bear.

My tent was up in a couple of minutes, and in a few more we were all fast asleep. In the afternoon the shikari went off to find traces of the bear. He found recent signs, and said he had been there the day before at least. Next morning we ranged round, and at last spotted him on the hillside, and coming towards us. We rapidly approached each other under cover of a hillock. I had only to climb the hillock and meet him face to face. The moment arrived, and I peeped over the top; a treacherous puff of wind had given the show away, and the bear was in rapid retreat and already three hundred yards away. I took a couple of shots and saw the snow spurt up close to his side. That finished it. He was off at a pace which was something to wonder at.

On the following morning we started up our side of the river, and later met the remainder of the party. We marched up, each on our side of the river. About two further marches up it was decided that a crossing was possible. Early morning was chosen for the attempt, as these snow-fed rivers are at their lowest at that hour. They are also at their coldest. We joined hands and started. The water was icy, and it was a horrible feeling as it crept slowly up my body. It got deeper and deeper, and the current stronger and stronger. My body seemed in an icy vice as I struggled along breast high. I was thankful when it was over, and I got into my tent, had a rub down and a change, followed by a hot breakfast which the bearer had prepared. We were now on the edge of the Lesser Deosi, and decided to camp for a few days while the country was explored for game. I got out my rod and did a bit of fishing. The sport was good and the bag heavy, in spite of the fact that I threw back anything under two pounds, to the horror and astonishment of the coolies.

At the end of the day I gave each of the porters a nice fish, weighing about two and a half pounds or so. It was interesting to watch the preparation for cooking. The camp was pitched far above the tree line, and the only fuel available was grass and grassy roots. A small fire was made with these. The coolies sat round. Each held his fish, first one side, then the other, for a few minutes to the blaze, and then, considering it sufficiently cooked, ate and, I presume, enjoyed it.

Each night at this altitude it froze hard, and one's tent was covered
with three or four inches of snow. Looking out at the coolies one evening sitting in a huddled-up bundle in the snow, I thought they would be more comfortable under some shelter, and sent them out my ground sheet. They were delighted. A fragile tent was made with khud-sticks and the ground sheet, and as many as possible scrambled under. They played just like children. Later in the night I looked out. The ground-sheet shelter stood discarded and half buried in the snow; the coolies formed a lightly packed mass, fast asleep. They are a hardy race and do not even know what comfort is.

After a couple of days, as there was not much evidence of game, we decided to move on. The shikari advised a very early start, as he said there was a "thora kharab jagah" to be passed. When discussing routes the shikari is always on the optimistic side. A rough pony track will be described as "smooth as a high road," a tiny path on the hillside is a "good road," and a goat track up a mountain as steep as a house is an "easy path." When he tells you that it is a rather bad road it awakens your apprehensions, and a nearer view will seldom soothe them.

We started. Climbed up a ridge and over a saddle-back, and here the path ended! We had arrived at the bad place! I stood on the precipice edge. Half a mile below, a dark ribbon in the snow was the river. I could see no way down.

The shikari assured me it was all right, and we started a scramble over the rocks. A few yards, and we came to a sheer drop. Thirty or thirty-five feet below a pine tree trunk rested on a little ledge. The top of the tree was at our feet. This was the path. A coolie wriggled over the edge, clasped the tree trunk and slid down. I most reluctantly followed. I had a horrible feeling that the pole and I would topple over backwards into the gulf below, and wondered which would reach the river first. These cheery thoughts were interrupted by the feel of the coolie's hand guiding my feet to safety.

We now stood on a little ledge five or six feet wide, on either side sheer rock, off which a fly would get a nasty fall. Twenty or twenty-five feet away, and slightly below us, was another ledge connected to ours by another tree trunk. You turned your face to the wall, placed your hands on the rock, and side-stepped along the tree to the next resting-place; from here the road was more comfortable. A tiny little path had been constructed in some wonderful way. It was wedged into, built up, or stuck somehow to the face of the cliff, wound in and out, taking advantage of every little crevice and ledge, and at last reached the foot of the cliff. I was glad when I was safely down, but felt anxious when looking up to see the porters following the same path. They had to side-step the whole way, as there was no room for their packs on the narrow shelf.

We camped at the foot of this cliff and decided to cross the river in the early morning. I noticed that the old bearer declined to wade, and was carried across on the shoulders of a porter. Later I asked him how much
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this luxury had cost him. He assured me that he had tipped the man two annas. I am quite sure he was never guilty of such reckless generosity. The reward much more probably took the form of a small donation of tea and sugar. My tea and sugar!

We ranged the hillsides and unsuccessfully stalked some ibex. Traces and tracks of bear were found, but most of them old. It was decided to cross the plateau and try some of the warmer valleys, where the bear might have gone after the tender grasses, etc., springing up as the snow receded.

The night before we crossed there was a heavy fall of snow. The day broke clear and cloudless and, unfortunately, with a strong wind. Soon after the start there were complaints about the glare. It was late in the year for fresh snow, and most of the porters had omitted to bring their snow glasses. These are little bits of green glass stuck on the end of a tin tube. When fastened over the eyes they give the men the stalk-eyed look of crabs. Soon the unprotected porters were quite blind, and had to march along with their faces covered with their puggaries and holding the khudstick of the man in front as a guide. The shikari and I walked in front and broke a trail through the snow. Even with my thick glasses the glare was blinding. Closing the eyes hardly seemed to bring relief. The reflection from the freshly-fallen snow, backed up by the wind, cut and blistered my face until I felt it must be absolutely raw. We were a miserable crowd as we marched along. We struggled along and at last began to descend. The contrast was startling. In the course of a few minutes we passed from midwinter to glorious spring. All around was fresh green grass and flowers bathed in a delightful sun.

The camp was put up and I got inside my tent as quickly as possible, as the slightest breath of wind on my blistered face was an agony. I examined myself in a small glass and gently stroked my blistered nose. To my horror a complete skin cast came off! Visions of frost-bite flashed across my brain. However, a careful examination of the pink and tender organ showed that it was quite healthy. The porters sent a request for tea to bathe their eyes. I sent them out a supply, and a brew was made.

They sat around and alternately bathed their eyes in and drunk from the bowl. As we journeyed down the nullah I was fortunate to meet a local “tehsildar.” He inquired about my sport, invited me to a local polo match, and ordered the villagers to go forth far and wide and discover a red bear at once or incur his everlasting displeasure. The polo match was most interesting. People from all the district collected on a smooth patch of turf by the river bank and sat down in a huge circle. The inside of the circle constituted the polo ground. The number on either side appeared to be unlimited. Newcomers stripped themselves to the waist and joined one or other of the sides. Those whose ponies were too exhausted to continue withdrew and joined the group of spectators. There were no rules of off-side crossing, etc., and it is a wonder numbers were not killed. Occasionally the ball got under a rock or into a hole. A spectator would at great
risk of his life dash out and pick it up, and throw it in the direction of the
goal of which he was not a supporter. The "throw in" was curious.
One of the side galloped out from his party, threw the ball in the air, and
struck it while in flight with his stick. It was very seldom that the ball
was missed. Unfortunately the roll of films I took was lost, as I should
like to have had a record of that match, and I have never had an oppor-
tunity of seeing a similar one. The villagers, spurred on no doubt by the
"tehsildar," reported a bear up a very difficult nullah. It would be a hard
climb and porters could only carry the smallest loads. The shikari laid
down eight seers as a maximum. When a shikari shows such con-
sideration one may be certain that one is in for a stiff climb. And we
were. All day long we toiled over rocks, under rocks, through rocks.
Sometimes wading through half-melted snow along the river edge, another
time carefully scrambling along a rocky knife-edge high up the nullah. At
last I was thankful to be told that the next meadow would be the one in
which we should camp.

In spite of the difficult march, throughout the day a careful watch had
to be kept for game, and every little meadow or hollow was carefully
examined before we crossed.

Our proposed camping ground was approached with the usual caution.
We were high up, working our way along the crest of a ridge, and carefully
looking over we saw two bears quietly feeding in the meadow below, about two
hundred feet above the river and about five hundred yards away. A smooth
gassy slope led down, and there was a deep gully along which a stalk could be
safely made. Easy as it was disaster nearly overtook us. Pressing forward too
eagerly, I slipped on the grass and instantly started glissading down towards
the river. The shikari, who was below, took in the situation at a glance
and drove his khud-stick into the ground below me; I grasped the handle
as I slid past and all was well. The stalk was resumed, and getting to
about the line of the bears I crept up the crest and looked over. Both bears
were just below me and only about twenty paces away. Even now they
were unaware of my arrival. I aimed at the nearest just as she spotted me.
She fell in a crumpled heap, and I swung over and fired at the other as he
rushed down the slope. Hit below the shoulders, he went head over heels
down into the bushes below.

The shikari and I gave a shout of triumph and shook hands and con-
gratulated ourselves. A shout from above and we saw, as we thought, the
second bear rapidly scrambling along the hillside about one hundred yards
away. I fired a couple of shots, the first short. At the second he paused
and then rolled down the hillside. We examined the first bear, dead at
our feet, and then followed the track made by the second. To our astonish-
ment he lay dead in the bushes! We hurried to where the victim of my
third shot lay. Blood-stained grass showed the position, but there was no
bear. His path up the nullah was plainly evident, and we at once pro-
ceeded to follow him up. He had moved rapidly. At one spot he had laid
It was now getting late and darkness was rapidly setting in. We reluctantly gave up the chase. Next morning we again picked up the trail. The bear had turned and was making his way back down the nullah. Indeed, during the night he must have passed within a hundred yards of the camp. We followed to a bend where he had entered the river and either got across or had been swept away.

A coolie was at once sent to the village to get men to examine the other side of the nullah. No signs were found to show where he had landed, and we heard no more of him. My long chase after the red bear had ended with success.

Next day we struck camp and made our way back into the main nullah. The dâk coolie started off for Srinagar with the two skins and heads rolled up in a blanket, taking care, however, that a piece of skin or paw was visible to let all know that his sahib at least had been successful.

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Current Literature


The author states that as a rule plankton and related organisms are most abundant in water which is in process of recovery from pollution by sewage; that is during natural purification, and he groups his observations under the head of three questions which he endeavours to answer by proof.

The questions are:

1. Are the activities of these organisms a part of natural purification?
2. What effects, if any, are produced on water by the presence and activities of these minute forms of life.
3. What are some of the activities?

The activities of the plankton organisms are chiefly concerned with obtaining food and reproduction of species, the matter of food supply being dominant, and are discussed under the heads of: (1) plankton food; (2) photosynthesis; (3) expenditure of plankton energy. A noted German investigator some years ago classified all plankton organisms as "food producers," and "food consumers," including in the latter those organisms which by means of cilia swept bacteria, etc., into their mouth vacuoles. Observers in general have noted certain plankton forms to be always present and associated with sewage and their decrease or absence when the bacterial content becomes low. In three rivers thus far studied (Potomac, Ohio and Illinois) these pollutional organisms are most numerous in that