old families" would make a stand; but he drive him in the Park at unnatural hours, and could he suppose that she would be indifferent to his want of income,—a point in which only take them!" He seldom answered her he failed to do her justice; for, thinking the notes, and he disliked extremely the way in fact that he had remained poor a proof of much pleasure to reflect that, as Newton's little property was settled on him (with safesince to what he left her no disagreeable con- stitious politeness to women, it comes over me ditions, such as eternal mourning, for instance, that some very strong motive must have were attached)—that as Newton, I say, operated to make him give his friendly—his enjoyed the pecuniary independence which only too friendly—cousin the cold shoulder. befitted his character, her own income was Nevertheless, when he received her reproachample even for two, and she might give herself ful letter (after it had had time to work a litthe luxury of taking a husband who should tle), he said to himself that he had perhaps owe her something. Basil Ransom did not been unjust and even brutal, and as he was divine all this, but he divined that it was not easily touched by remorse of this kind, he for nothing that Mrs. Luna wrote him little took up (I have already mentioned it) the notes every other day, that she proposed to broken thread.

never suspected that she cultivated these top- that when he said he had his business to ics (her treatment of them struck him as highly attend to, she replied: "Oh, a plague on your comical) for the purpose of leading him to business! I am sick of that word—one hears the altar, of beguiling the way. Least of all of nothing else in America. There are ways of getting on without business, if you would notes, and he disliked extremely the way in which, in spite of her love of form and order, delicacy in a shopkeeping age, it gave her she attempted to clamber in at the window of one's house when one had locked the door; so that he began to interspace his visits conguards which showed how long-headed poor siderably, and at last made them very rare. Mr. Luna had been, and large-hearted, too, When I reflect on his habits of almost super-

(To be continued.)

Henry James.

FRANK HATTON IN NORTH BORNEO.

NOTES ON HIS LIFE AND DEATH, BY HIS FATHER.

I.

FRANK HATTON, without being precocious as a child, developed singular versatility of talent at a very early age. Fond of music, he was a skillful pianist, and could play several other instruments moderately well. He could ride, swim, shoot, skate, and had some long spins on the tricycle; he played chess with great skill, spoke French with a perfect accent, wrote his native language with the polish of a gentleman and the finish of a scholar; was a master of Malay, the Italian of the East, and was versed in Dusun, one of the local tongues of Borneo; and was an authority in the water filtrations and the actions of force on bacteria, and in other matters of scientific research. He died in his twentysecond year, a scientific explorer in the ser-vice of the government of Sabah, leaving he was not only my son, he was my friend was the first white foot in many of the hitherto unknown villages of Borneo; in him many of was the pioneer of scientific investigation and protected from every adverse wind. I

among its mountain ranges, on its turbulent rivers, and in its almost impenetrable jungle fastnesses. Speaking the language of the natives, and possessing that special faculty of kindly firmness so necessary to the efficient control of uncivilized peoples, he journeyed through the strange land not only unmolested but frequently carrying away tokens of native affection. Several powerful chiefs made him their "blood brother," and here and there the tribes prayed to him as if he were a god. When he fell in the unexplored regions of the Seguama River, his escort rowed the body by river and sea for fully fifty-three hours without sleep, that it might be buried by white men in the new settlement of Elopura, - an act of devotion which travelers in the equatorial seas will understand and appreciate.

behind him a record that would have been and companion. He lost his life while on his honorable to a long and industrious life. His way home. The news of his safety and his good health preceded by a few days the telegraphic report of his death. My own young the wild tribes saw the first white man; he life had been a hard one. His I had guarded

had my reward in a brave, upright, tenderhearted, modest, scholarly son. To-day, with the bright page of his young life before me, with letters concerning him coming to me from all parts of the world, I feel that I owe a duty to his memory and to humanity to tell his story. The justice of my interpretation of this can be judged by the following mater-

ials upon which it is founded.

Frank Hatton was born at Hatfield, Gloucestershire, a suburb of Bristol, England, on the 31st of August, 1861. He was connected on his father's side with journalism and music; his mother brought him the health and common sense of the sturdy yeomanry of Lincolnshire. Soon after his birth his parents went to live at Durham. He was known in his childhood for the amiability of his disposition, his love of flowers and animals; he developed a character of great strength and firmness. From Durham the family went to Worcester; after living in Worcestershire, city and county, for some years, to London. At the age of ten he went to his first public school; his chief prizes were for good conduct, and he gave no indication of the characteristics which distinguished him a few years later. At home he cultivated a taste for music and war. He was a collector of arms, pistols, swords, and knives, and his bedroom was quite an arsenal. A frequent visitor at the Zoölogical Gardens, he would bring home every stray dog or cat that would follow him. From the end of 1874 he was a student at the College of Marcy, near Lille, in France. He next became a student of King's College School, where in 1878 he obtained, at nineteen, the third place in the Oxford and Cambridge Examinations.

He had given evidence of a leaning towards scientific studies, and he elected to be "a chemist and mining engineer." Natural history at Lille, physical geography at King's College School, had prepared him for chemistry and mineralogy at the School of Mines. After a short interval of foreign travel, and some private readings with chemical experts, he entered upon the varied course South Kensington, which he supplemented by geological tours around London, and in the Isle of Wight, Derbyshire, Cumberland, and other districts. "He was," says Dr. Franktalented students I ever had in my laboratory; skillful manipulator." Dr. Hopkinson, speak-

of things; there was nothing he could not do that he cared to do." In addition to his arduous work at South Kensington, he contributed a series of letters on chemical subjects to papers

and magazines.

When he left England for the islands of the eastern seas, young Hatton was close upon six feet in height, and carried no surplus flesh. After exploring a great part of North Borneo, he organized an expedition in a north-eastern district, chiefly with a view to determine the geological character of the Seguama River and certain regions of the Kinabortomgau. His expedition consisted of four boats. He was in the first one, and Mr. Beveridge, an Australian mining expert, in the last. Hatton fired from his boat at an elephant and wounded it severely. Leaping ashore, accompanied only by his mandore, a Malay named Drahman, he gave chase. They came up to the elephant, which had stopped and was roaring. Thinking possibly that his Winchester rifle was too light for a final attack on the elephant, he went back to the boats for a party of his native attendants. Arming them with Sniders, he led them into the jungle. The elephant, however, had moved off, and it being now nearly dark, he was persuaded by Drahman to return. On the way back he was walking with his Winchester at the shoulder. As he stooped to pass under a creeper, he raised his rifle to lift up the obstruction. The weapon became entangled in an unusually strong growth of vines, whereby the muzzle was suddenly twisted towards him, slid down his shoulder, and went off, the trigger being pulled by some twigs of the creeper. The ball entered at the collar-bone and came out at the back lower down, severing two main arteries. His men were round him in a moment, and seized him before he fell. "Oodeen, Oodeen, mati sahya!" (I am dead), he said in Malay, as he laid his head on the shoulder of his Tutong boy, whose name is Oodeen, and who was devoted to his service. Mr. Beveridge heard the shot and the cry of the men, and, leaping from his boat, was soon by the side of his young chief, who was breathing his last. of study then given at Jermyn street and at It was so inconceivable to Mr. Beveridge that Frank Hatton, noted for his coolness and his care in the management of his weapons, had been the cause of the shooting, that he exclaimed, "Who has done this?" The men, land, "one of the most genial, earnest, and most of them shedding bitter tears and crying, "Better we had died," explained the incident; he was a most indefatigable worker and a and after satisfying himself that their story was only too true, he had the body carried to one ing of him to me the other day, said, "He of the largest boats. It was night now, and was the only student of his time to whom I in- the lamps which had been brought on shore trusted delicate and dangerous operations; he to aid the search for the wounded elephant in was implicitly reliable, and had a clear, firm grip the jungle were used to throw a light upon the affectionate acts of devotion followed. Eleven the Sibruco on the east, will indicate the terriof the followers, under the direction of Mr. Beveridge, paddled the body to Sandakau by river and sea, a distance of nearly one hundred and seventy miles. They did not sleep, night or day, for fifty-three hours. They only rested three times to cook and eat a little rice.

An inquest was held at Elopura in the bay of Sandakau, and adjourned from time to time during two or three days, until all the boats came in and every man could give his evidence. Doctor Walker said the wound was perfectly consistent with the statements of the mandore and the boy Oodeen. It was inconsistent with the theory that one of the other rifles might have accidentally exploded, as Mr. Hatton was taller than any of the natives and the bullet had entered from above. Further, it seems that the men acted on a general order from Mr. Hatton never to carry their weapons loaded, and only to load when there was something to shoot at. Questioned as to his relations with his men, Mr. Beveridge said, "Mr. Hatton was on the best of terms with his men; they would do anything for him." The jury, which consisted of twelve Europeans, recorded a verdict of which the following is a part:

"The jury are of opinion that Frank Hatton came by his death from the accidental discharge of his rifle on the evening of the first of March, while returning from elephantshooting at Sugoon Jukol, which is situated about sixty miles up the Seguama River, and about one hundred and sixty miles by water from Sandakau, and whilst he was pushing aside a vine with the end of said loaded rifle

carried in his hand.

"The jury much deplore the sudden death of Mr. Hatton, who as an explorer and mineralogist had proved himself of much value to the British North Borneo Company, and to the world generally, and on account of his

many social qualities."

Borneo is, with one exception, the largest island in the world. With a coast-line of over three thousand miles, it is larger than France, and three times the size of England. In 1847 the government of Queen Victoria, impressed with the necessity of a marine station in these latitudes, purchased Labuan, an island off the NOTES FROM THE DIARIES OF FRANK HATTON. coast of Borneo, and formed a British colony, with a governor and all the necessary requirements of an efficient administration. Within the last few years a company of London capitalists have bought from the sultans and chiefs of the northern portion of the island the country known as Sabork. They have been incorporated under a royal charter, on the principle of the old East India Company. A line drawn across the map of Borneo, from the

embarkation of his corpse. One of the most Kimomis River on the north-west coast to tory hitherto called Sabork, now better known as British North Borneo.

> The pictures on pages 442 and 443 illustrate the newest settlement on the coast - Elopura, in Sandakau bay. Within a few years it has grown from a mere stockade into a busy port. On the wooded slope of its jungle suburb by the sea rests Frank Hatton, whose name will forever be associated with the exploration of the country. Although brick buildings are now being erected at Elopura, it is chiefly constructed after the manner of the ancient lake-dwellers of Europe, on piles, as all the modern Dyaks' and other native houses are in these littleknown regions of the Malay Archipelago. Frank Hatton's house, shown on page 442, was the first English house in the Kinoram

district of North Borneo.

The wild interior of North Borneo was for the first time partially explored only as recently as 1881, and it was in this year that its finest harbor was discovered by an English cruiser. Mr. Witti, an Austrian officer in the North Borneo Company's service, crossed the country without encountering any more than the natural obstacles of tropical travel, through jungle, and over unknown rivers; though he fell a victim to over-zeal at a later day, when making his way through known warlike and cruel tribes of Dyaks on the unexplored border-land of the Sibuco River. He and his followers fell into an ambush and were slain. It was to supplement and extend, on a scientific basis, the investigations of Witti, that Frank Hatton went out to Borneo; and nothing is more remarkable, experts say, than the amount of solid work which he accomplished within eighteen months, right on the equator, in a country without roads, thick with a jungle-growth of centuries, its rivers the home of the crocodile, its "forests primeval" abounding with animal life, and peopled by half-naked savages, many of whom had never before seen a white man.

ONE of Frank Hatton's most important explorations was a journey up the Labuk River and overland to Kudat, commencing March 16th, ending June 19th. Avoiding geographical technicalities on the one hand and mineralogical and other scientific details on the other, we propose to make such extracts from this diary report as will interest the general reader, while throwing new lights upon native manners and customs and giving fresh incidents small island, into whose right passage flows a

of tropical travel.

"By the 3d of March," he says, "we were well afloat on the Labuk, a bold stream, having a rapid current. At mid-day we passed two small tributaries, one on the right and one on the left. The banks were lined with nipa palms and the stream was very deep and rapid. The weather to-day was beautiful, and nothing could be more delightful than steaming up this unknown river. Presently we left the swamps behind us, and now the banks were lined with vast forests, from whose somber depths could be heard the cries of hornbills and the chatter of monkeys. Enormous creepers hung in pendent growths from the great dark trees; butterflies and insects of every hue and color fluttered before us; the sun blazing out and shedding a golden radiance over the scene.

"Tander Batu turned out to be a small village on the right bank of the river, having a population of two hundred and fifty persons; only five large houses. The people were originally Sulumen, but having lived for generations in the Labuk they call themselves 'Labuk men.' The chief of this part of the country is Datu Serikaya, who has the company's flag flying on a post outside his house, with two old iron cannon beside it. We sat there for nearly three hours talking over the matter of procuring 'gobangs,' or dugouts, two of which I obtained from a Hadgi trading up the river. I got no assistance whatever from Datu Serikaya. In Bongon, Sheriff Shea told me not to eat in Datu Serikaya's house, as dark stories are told of his having poisoned more than one person.

"In the wet season the Labuk must be terrible: there is a rise of at least twenty feet above its present level, with an irresistible current. Trees of enormous size are piled up on the banks, and even away in the jungle lie trunks of trees which had been swept there by the flood. The amount of denudation effected by these tropical rivers is enormous; vast beds of rolled pebbles, consisting of quartzite, quartz, serpentine, mica schist, porphyritic granite, etc., are to be seen all along the Labuk. The hills in this country are composed largely of rich clayey ironstone, and indeed, in one place near our last night's camping ground, where there had been a landslip, the exposure showed a bright red ironstone, which in England would have been jumped at as a source of wealth. On both banks of the river, at about a mile distant from the water, rise the Labuk hills, heights varying from five hundred to one thousand and two thousand feet.

on the 16th, and ran down the river as far as a prahu with Datu Mahmad (my guide when

tributary called the Telupid. . . . Not being able to find traces of any useful mineral in the Telupid, I left this river and followed up one of the tributaries, going overland to do so. Had the greatest mineral treasure imaginable lain hidden in the hills, nature could have taken no more trouble to conceal it. I was never in a jungle with so many leeches, as well as other crawling and flying pests. The rattans also were a great obstacle, stretched as they were across the path at heights varying from one inch to thirty feet. These catch the feet and trip up the traveler, while the rattan leaves hang down from above, armed with hundreds of thorns, each one strong enough to catch a fish with; and indeed they are used

for this purpose.

"Left our camp on March 17th, at Tanah Dumpas, and passed through the northern channel past a large island, which here divides the Labuk into two. Nothing but going up rapids to-day; we ascended one four feet high in twenty yards, and shortly afterwards got up one eight feet in fifteen yards, and passed a veritable whirlpool. The water rushing round a sharp bend was met by some vertical rocks, and the stream striking on these had created a dangerous whirlpool. Just above this pool there is a small Dumpas village, on the left bank, called 'Kabuan.' The population numbers thirty persons, and none of them dare go farther up the river than they are at present, as the men of Sogolitan have closed the river to them. We passed a splendid waterfall on the right bank, the mouth of the Bombolie, which is some eight yards wide, and falls from a height of fifty feet into the Labuk. We camped to-night just below a rattan, which was stretched across the river, marking the frontier of the Sogolitan and Delarnass countries.

"I was informed that in this district there are several thousand people calling themselves Sin-Dyaks. They are painted and tattooed in a peculiar way. On the other side of the rattan, which my Malays were not at all willing to go under, there was a guard of three Dyaks in a native dugout. Their boat was of capital workmanship, being carved at the bow. The men were tattooed with blue all down the arms, breasts, and legs, and had pieces of wood in their ears. They wore a head-cloth of common blue calico fastened on by a plaited rattan, which was passed over the top of the head-cloth and under the chin. They were armed with spears and native-made short swords, and looked very formidable savages.

"It was close upon noon when we started "Left Tanah Dumpas with my Dusun guides on again. My prahu was leading; a little



FRANK HATTON. (FROM PHOTOGRAPH BY VANDEWEYDE.)

we get to Kinoram) followed. Then came Smith and the police, and lastly the mandore and coolies, in a large prahu full of things. We had passed rather a difficult bit of river. when I heard a shriek, and looking round I saw several heads bobbing in the rushing river and a prahu, bottom upwards, floating down and dashing among the bowlders in the distance. I jumped from my gobang and rushed to the spot; but before I arrived the prahu had gone out of sight and most of the men had got ashore, some with great difficulty and many narrow escapes. The Dumpas men, who swim like fishes, were of great help in getting the people ashore, and had it not been for them I think the accident would have been a fatal one. The missing goods were many; the severest losses being two bags of rice, three rifles, six axes and some parango, and a box of blow-pipe apparatus; while all the men's clothes, blankets, etc., had gone out to sea, and some poor fellows had scarcely a rag to stand in. The Dumpas and Sulu men who were following us dived all day trying to recover goods, and by their means two guns and half a bag of rice were got up. The Dyaks here gave us no help, and indeed their prahus were on the watch at a bend of the river some way down for blankets, kaglangs, or other things which might float down, and which they would very quickly clear up. These people are indeed head-hunters. Only seven days ago a head was taken at a treebridge over a torrent. A Dumpas man was walking over a felled tree (which in this country always constitutes a bridge), when four Sogolitan men set on him, pushed him down the steep bank, and jumping down after him took his head and hand and made away. I

not far from the scene of the murder. Some four or five weeks ago the Sogolitan chiefs, Iamboune and Pongout, admitted that seven heads had been taken from slaughtered men of Tingara (a country near the Kinabatangan). He (Iamboune) said there was a blood feud going on between the men of 'Loundat' in Sogolitan and the Tingara tribes.

"Having got our things together, we crossed the river and made our camp for the night. It was useless to expect anything from the Sogolitan people, as they had already requested us not to go up to their houses, as their women were afraid. The Dyaks here all eat monkeys and preserve the skins, which they fasten round their waists, letting the tails hang down behind, so that in the distance

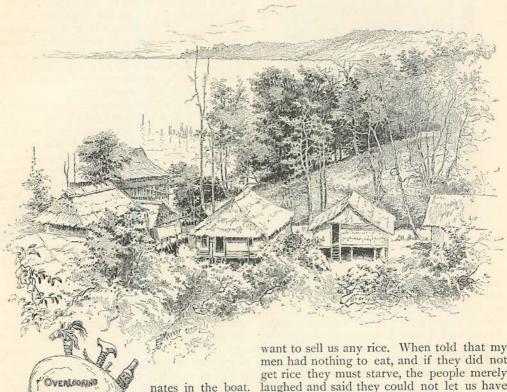
they look like men with tails.

"Progress up the river is very difficult and dangerous; I think we ascended about fifty feet to-day, divided in three rapids. We passed under a second rattan stretched across the river between Kananap, a district of Sogolitan, and Sogolitan proper. These two rattans form one 'key' to the country, and if one is cut down, in defiance, the Dyaks never leave the war-path until the offenders' heads are at rest with the others in their head store. All these people are very superstitious. The 'bad bird' is a great trouble, for it causes trading parties to turn and go back, even when within sight of the end of their journey. On head raids there are several special birds, and great attention is paid to their warnings. If the bird flies from left to right and does not again return, the whole war party sits down and waits, and if nothing comes of the waiting every one goes home. This evening I caught a first sight of Mentapom, stated by Mr. Witti to be eight thousand, but which I should think is at least nine thousand feet high. It is a fine bold peak, with exposures of white rock near the summit, and is not unlike the Matterhorn.

"We camped on the 20th, almost at the foot of Mentapom, and I fired my gun several times as a signal to a prahu which had not yet come up. Some Dusuns, who were catching fish, asked us not to fire, as it made the spirits on Mentapom angry, and we should be sure to get rain. I cannot tell how they got hold of this curious superstition, but, sure enough, half an hour afterwards the rain came

down in torrents.

seven days ago a head was taken at a tree-bridge over a torrent. A Dumpas man was walking over a felled tree (which in this country always constitutes a bridge), when four Sogolitan men set on him, pushed him down the steep bank, and jumping down after him took his head and hand and made away. I saw the victim's head and his hand in a house "At about 9 o'clock the next morning the missing gobang came up. Terrible news! She had gone over and all the things had been lost. A gun and sword-bayonet, a box of tinned provisions, four or five blankets, half a bag of rice (being all the rice we had to feed twenty huntors), and all the biscuit, besides endless things belonging to the Datu and the unfortu-



This is a most ter-

rible thing for us, as the men have not a

grain of rice to eat.

I was thinking over

the situation when one of the men said

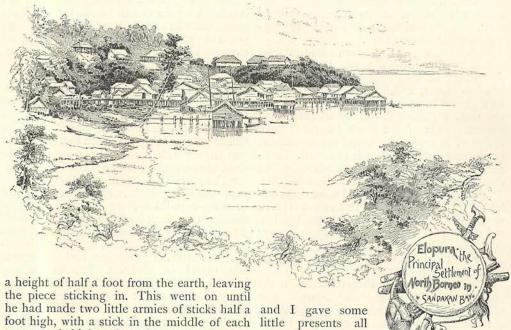
he could see a house on the top of a hill near the base of the Mentapom. He pointed it out to me, and I determined to go up and try and get food. Taking some cloth and four men, I went forward. At our approach all the people ran away and shouted, 'Take the paddy; there it is, there it is!' They were in the midst of cutting paddy. When they saw that we did not intend to rob and murder them, they came back, and gaining confidence by degrees, they at last did not

andakan B

men had nothing to eat, and if they did not get rice they must starve, the people merely laughed and said they could not let us have any, as it was not yet time. They have some superstition connected with the beginning of harvest. However, we frightened them a little, and finally succeeded in getting some rice. We left these inhospitable shores at four o'clock.

"On the 26th of March I left Tampias for the Dusun kampong in a small prahu. On arriving there. I was received by the headman, 'Degadong' (a name given by Datu Serikaya), who said he had never before seen a white man, although he had heard of Mr. Witti. His house is called 'Ghanah,' and the country is called 'Touaorum.' It is situated on a hill to the south and on the right bank of the Labuk river. The following day was fixed for 'the cutting ceremony,' which was to take place at my hut. Afterwards Degadong promised guides and porters. I told him I wanted to keep on the right bank, and he said, 'Oh, yes, I could do that.' At about 12 o'clock on the next day the Dusuns began to arrive, boatload after boat-load, until some hundred men had collected, all armed with spears and swords. The chief now came up, and we at once proceeded with the ceremony. First the chief cut two long sticks, and then, sitting down, he had a space of ground cleared before him, and began a discourse. When he came to any special point in his discourse he thrust a stick into the ground and cut it off at





army much higher than the rest, and representing the two leaders. These two armies were himself and his followers and myself and my men. Having called in a loud voice to his god, or Kinarahingan, to be present, he and I took hold of the head and legs of the fowl while a third person cut its head off with a knife. We then dropped our respective halves, and the movements of the dying fowl were watched. If it jumps towards the chief, his heart is not true; if towards the person to be sworn in, his heart is not true; it must, to be satisfactory, go in some other direction. Luckily, in my case, the fowl hopped away into the jungle and died. All my men now fired three volleys at the request of the chief,

SECTION OF STOCKADE SURROUNDING FRANK HATTON'S HOUSE. (FROM SKETCH BY HIMSELF.)

around and sent the people away pleased and delighted. "The Dusun headman

"The Dusun headman, 'Degadong,' was very kind. He presented me with a spear, and I gave him a long knife. This exchange of weapons is customary after the fowl ceremony.

"Two chiefs of 'Touaorum,' Degadong and his brother, accompanied us on our first day's tramp overland. The road lay over a high ridge, and we had often to climb heights of two thousand, and in one case upwards of three thousand feet. From the summit of one of these, where there was no high jungle, I had a splendid view of the country. To the north lay the Kinabatangan valley, with the Silam hills in the distance; eastward stretched the Labuk, girded by hills rising one above the other up to the noble crags of Mentapom. In the distance again was the Sugut vale, with range upon range of tree-capped mountains rising right away to Kinibalu, which, seemingly near, towered like a fairy castle up into the blue sky. I shall never forget this lovely scene, but more especially shall I remember the wonderful tints and shades presented by the distant 'giant hills of Borneo.' A blue sky showed up every crag of the principal mountain, which stood out purple and black. The setting sun shed its rays on rock and tree, and the water streaming down the time-worn sides glinted and flashed, while all the nearer hills were clothed in every shade of green. A few white clouds appeared in the distance, and as I neared the Dusun kampong

view, and one which this season of the trop-

ical year can alone afford.

"On March 31st some men came in from collecting upas juice. I asked how it was obtained, and they said they make a long bamboo spear, and, tying a rattan to one end, throw it at the soft bark of the upas tree; then pulling it out by means of the rattan, a little of the black juice will have collected in the bamboo, and the experiment is repeated until sufficient is collected. I cannot tell what truth there is in this story, but the people had no reason for deceiving me. The Dusuns at 'Toadilah' all wear brass collars, bracelets, and anklets, and a piece of black cloth round the head, kept on by a band of red rattans. The women wear a short sawong of native cloth, which is fixed on tightly at the upper part by brass wire. They also wear collars and anklets of brass wire.

"On the 4th of April I was initiated into the brotherhood of the Bendowen Dusuns. The old men and all the tribe having assembled, the ceremonies began. First the jungle was cleared for about twenty yards, and then a hole was dug about a foot deep, in which was placed a large water-jar. In this country these jars are of enormous value: \$30, \$40, and even \$100 worth of gutta being given for a single jar. The bottom of the jar in question was knocked out, so as to render it useless in future. The clay taken out to make the hole was thrown into the jar, and now the 'old men' began to declaim, 'Oh, Kinarahingan, hear us!'—a loud shout to the Kinarahingan. The sound echoed away down the valleys, and as it died a stone was placed near the jar. Then for half an hour the old men declared by fire (which was represented by a burning stick), by water (which was brought house. in a bamboo and poured into the jar), and men. A sumpitum was then fetched, and an arrow shot into the air to summon the Kinarahingan. We now placed our four guns,

of Toadilah night clouds were closing in the which were all the arms my party of eight glorious landscape. It was a most exceptional mustered, on the mouth of the jar, and each put a hand in and took a little clay out and put it away. Finally several volleys were shot over the place, and the ceremony terminated.

> "On our way from Senendan we passed a solitary grave, marked by a rough stone; the rank grass grew high and green upon it. When I noticed it one of the headmen was on his knees busily tearing away the grass, and talking to the dead man's 'ghost.' He was telling him that the white man had come, and was friends with the Senendan people. The dead man was the brother of the chief.

> "The Muruts here are much tattooed. Those men who have fought, or have gone on bold or risky expeditions, are tattooed from the shoulders to the pit of the stomach, and all down the arms in three broad parallel stripes to the wrist. A headman, or rather a sometime headman, of Senendan, had two square tattoo marks on his back. This was because he ran away in fight, and showed his back to the enemy. Another and a braver chief was

elected in his place.

"There was a dead man in one of the houses here, and I went to see him. He was placed in a sitting posture, dressed in all the things he had; a cigarette was being held to his mouth, and a brass box containing betel, etc., was open before him. His friends were seated around, and were telling the dead man not to go to the right or left, as they were the wrong roads, but to keep straight ahead, 'and that is the way to Kini Balu.' This ceremony lasts one day and one night, and the next day the man is buried with all his belongings.

"Smith [a coal-miner], who is ill, and nearly all the men (most of them also ill), went on to Kudat. I stayed at Kinoram until April 24th, getting material ready for making a

"Subsequently I went down to Bongon, and by earth, that they would be true to all white had a tremendous struggle getting stones and kajangs to Kinoram in two prahus up the Kinoram River. The river is quite unnavigable, full of rapids and waterfalls, and subject



THE JOURNEY BACK.

to the most sudden floods. No prahu has floor to a depth of about eighteen inches, usual good luck I got all the things up, nothing lost and no one hurt.

"I have been in the Bornean bush from March 1st until June 15th, and have traveled several hundred miles by land and river."

During the following July, August, September, and October of the same year, 1882, Frank Hatton conducted an expedition of scientific investigation in the Kinoram district, where he built this first house referred to in the above report. The following extracts are from an abstract of his diary of these investigations.

"As we proceeded up the Kinoram River our road became worse and worse. About two miles up we came to a long stretch of deep and rapid water with precipitous cliffs on either side. It took us until night to get past this obstacle, which, however, we managed to do by clinging on to the almost impassable face of the cliff by roots, trees, or any other hold we could get. The men with heavy loads had a very hard time getting past. The moment we were over, we pitched our camp on the first place which offered, and got some huts made as quickly as possible. I notice that the rock along the lower portions of Tomboyonkon is limestone, of which there are many bowlders in the river, together with

pieces of a dark, fine-grained syenite, which

must come from above.

"Terrific work all day climbing over immense bowlders, where a slip would simply be fatal. Great landslips have occurred all along the stream, and enormous bowlders have consequently blocked up the bed. The river flows along the spur from Kini Balu, which, running north-north-east, culminates in two peaks, Nonohan-t-ayaioh, 8000 feet, and Tomboyonkon, 6000 feet, the terminal mountain of the spur. As we traveled along I noticed in a small cave in the rock some twenty or thirty swallows' nests. They were greenish-white below, and fixed to the rock by a white glutinous substance. They are said to be worth about a dollar per catti.

"No description could do justice to the difficulty of our road, and the dangers and troubles we passed through could only have been compensated by a great mineral find. At four o'clock, being quite wet through, we camped in a cave, or rather a hole formed of gigantic fallen rocks, one fifty feet and one forty feet high, with eight or ten of fifteen feet and upwards in height forming sides to the cave, which also ran some ten or twenty feet into the rock. The outer apartment was filled with swallows, while the inner one was

ever navigated the river before; but with my there being the same thickness of bird guano in the outer cave. A very rank, mouldy, badger-like smell pervaded the place, and on the roof were about a hundred of the nests previously noted. It was a romantic night sleeping there with the men stowed away in crevices and holes in the cliffs, the vast nature of the latter being most impressive. We were here, with the uncertainty of ever being able to get back or forwards, with provisions for only a few days, and not a living soul in the whole country round, nothing but trees; the true primeval forest of Borneo reigns supreme in these hilly fastnesses, and the camphor and gutta trees near the source of the Kinoram have yet to feel the axe of the pioneer and the trader. We are now up the river about seven miles, and if rain should flood the stream retreat would be quite impossible.

"Up very early this morning (Aug. 8th), as a pain in my knee kept me from sleeping. Not a soul was stirring as I walked about the camp; the last embers of the watch-fire were smoldering away. All the grass and leaves were wet with the morning dew, and the men stretched around in every conceivable position were huddled together in their blankets, for the mornings here are damp and chill. Later on I found that a regular breakdown of the health of our party had occurred, perhaps owing to the sudden change of climate. Out of fifteen, seven were down with fever, including Mr. Beveridge and the two Chinamen. I employed the morning dosing all hands with enormous potions of quinine and epsom salts.

I waited here the day in hopes of a change. "The Chinamen and two Malays are to-day (Aug. 9th) so ill that I sent them back to Kinoram in charge of Dusuns. Mr. Beveridge is better, so we started away on a trip to Marudu. We arrived at Pudi shortly after one o'clock, having traveled only six miles. Every one, however, was quite done up, so we made a stop at Pudi. I think the roughing up the Kinoram tired out all the men. The house at Pudi is a wretchedly dirty place, and the people more miserable and poor than most Dusuns. They 'prayed me for rain,' saying that if the heat continued their crops would wither and they would perish. their potatoes and kaladis are almost dead for want of rain, and indeed the drought is rather severe. I told them to ask their 'Kinarahingan' for rain, but they said it would be better for me to ask the Kinarahingan, as my asking would surely be answered. It is a curious supposition this of the Dusuns, to attribute anything, whether good or bad, lucky or unlucky, that happens to them to sometenanted by bats, whose guano covered the thing novel which has arrived in their country.

Kias, Lobah, in fact everywhere. I can only conclude that the natives have the most imperfect idea of time, for just now is the close of the dry season, and therefore of course

very hot and dry."

These extracts are of the briefest; and yet we have only space to refer to the explorer's last diary, a pencil record of his last exriver, during the prevalence of the rainy searible voyage." His duty was to prospect the his last observation.

For instance, my living in Kinoram is thought Seguama district for gold, to the existence of to have caused the intensely hot weather we which the testimony of all the natives of the have experienced of late. This is attributed east coast unanimously points. With this obto me by all the Dusuns of Kinoram, Munnus, ject, accompanied by Mr. Beveridge, the companion of all his journeys in Borneo, and by a party of Malays, he ascended the river. His diary is continued to the 1st of March, on which day he enters the note, "Just one year ago left Sandakan for the Labuk,"-the first inland journey he had made in the territory,and this was to terminate forever all his work in this world. The diary is posted up to 3:40, pedition, beginning January 6th, and ending about the time when he left his boat on his March 1st, 1883. It is a daily and often an fatal excursion after elephants. Other pens hourly report of (to quote the words of the Gov- have taken up the story of an expedition, ernor of Labuk himself) "an arduous exploring which when it comes to be chronicled will journey up the river Kinabatangan, and his fully establish the Bornean explorer's title to very plucky though unsuccessful attempt to the honors that are being conferred upon his reach the Seguama overland from the former memory. The trophies of the young scientist's work are packed away in the room he used to son. He was compelled to make the journey occupy in the home that knows him no more; by sea, and reached the Seguama with his party but of all those treasures, none are more in open boats on the 27th of February, after pathetic than the thumbed log of his last jourwhat he has described in his diary as a ter- ney, and the compass which he consulted for

Joseph Hatton.



LOVE'S IN THE CALENDAR.

WHEN chinks in April's windy dome Let through a day of June, And foot and thought incline to roam, And every sound's a tune; When nature fills a fuller cup, And hides with green the gray,-Then, lover, pluck your courage up To try your fate in May.

Though proud she was as sunset clad In Autumn's fruity shades, Love too is proud and brings (gay lad!) Humility to maids. Scorn not from nature's mood to learn, Take counsel of the day: Since haughty skies to tender turn Go try your fate in May.

Though cold she seemed as pearly light Adown December eves, And stern as night when March winds smite The beech's lingering leaves; Yet Love hath seasons like the year, And grave will turn to gay,-Then, lover, listen not to fear, But try your fate in May.

And you whose art it is to hide The constant love you feel: Beware, lest overmuch of pride Your happiness shall steal. No longer pout, for May is here And hearts will have their way; Love's in the calendar, my dear, So yield to fate in May.

Robert Underwood Johnson.