Beginning January 27, 1924, and ending September 21, 1924. Relating to the collecting of natural history specimens for the Smithsonian Institution by --

David C. Graham

January 27, 1924. About this time I was on my way to Yachow. Secured the white stork. It was in a flock of smaller white storks, so that the Chinese called it the king of the small storks.

February 4, 1924. About this time I came down the Ya River to Kiating. This river is famous for its fine duck hunting. It is the best river for duck hunting in Szechuan.

February 25, 1924. About this time I was at Chengtu, and came down the Min River to Kiating, securing some interesting specimens.

March 6, 1924. Came down the Min River from Kiating to Suifu.

April 14, 1924. Went on a two-hours hunting trip. Killed ten birds. Two were new to my collecting. The best skinner was busy and could not help. The other skinner did poor work, and argued that better work could not be done. I'll try giving all the work to the better skinner for awhile and see if the other skinner will wake up and do better. First steamer departed. Larger ones should come soon.

April 15, 1924. As soon as the larger steamers arrive it will be safe to forward the shipment of 710 birdskins.

April 16, 1924. So cold and rainy that the netter could not go out to work.

April 17, 1924. Storm continued, but cleared up a little in the afternoon. Mailed two boxes of insects. Receipts are numbered 13 and 14. One box is No. 159, 1924. Rat got in and destroyed a small-sized grebe. Have three other specimens. Hope he enjoyed the areenic.

April 18, 1924. Very hot.

April 19, 1924. Hot weather.

April 20, 1924. Two steamers arrived from Chungking, showing that after months traffic between Chungking and Suifu has opened up. I intend to send off all the specimens that can be sent by parcel post as early as possible, lest civil war breaks out or brigands again begin operations on the river, thus making it impossible to send the specimens.

April 21, 1924. Mailed 13 boxes, 12 of birdskins and one of small mammal skins.

Went hunting in the afternoon, securing nine small birds in bamboo groves just outside the city west of Suifu.

April 22, 1924. Mailed two more boxes of birdskins. Wrote consul.

Wrote Customs officials.

Wrote Postmaster, Chungking concerning the shipment of birdskins.

April 23, 1924. Wrote Consul Ogden about the road to Songpan, whether infested with brigands or not. Went to the post office to see about the specimens mailed. They will be sealed and forwarded today. May they travel safely and fast!! Two big moths hatched out of cocoons.

April 24, 1924. Secured and skinned a common house mouse (secured yesterday, skinned today).

April 25, 1924. Wrote to collector Ho at Chengtu. Wrote to a friend at Tsaw' Ting' Yunnan to secure a native collector of insects. Also wrote to a friend at Ningyuanfu, Szechuen. Two big moths hatched out.

April 26, 1924. Another big moth hatched out. Collector Chen brought several lepidoptera.

Packed the twenty-second box of birdskins, marked "Birdbox No. 17,80 Birdskins."

April 27, 1924. Another moth hatched out.

April 28, 1924. Several moths hatched out. Wrote Mr. Jorcgren at Kiating about taking specimens to Shanghai.

April 29, 1924. Tied ropes around the bird boxes. Packed insect box No. 161. Preparation for trip south of Suifu. Cabbage butterflies hatched out. I had fed the worms only a few days ago. They were in the cocoon stage only a few days.

LOVEGREN

April 30, 1924. Mailed box No. 161 - insects. Went to Li Chuang by boat. Saw some strange ducks, but did not get a shot at them. Practically all ducks have migrated northward. There was a big idol procession at Li Chuang that drew thousands of spectators.

May 1, 1924. Travelled about 18 miles to Gi⁴ Tien' Ba⁴. Got two small birds and a few small insects. Shot at a yellow-necked small white heron, a long-distance fly shot, but did not get the bird.

May 2, 1924. Travelled about 12 miles to Muh Jiu Piu. Killed a desirable bird, or rather wounded it. It dropped over a cliff. A farmer appeared and tried to catch it. I told him not to take it by the tail, but he did, and all the tail feathers came out. I turned the bird loose. Another bird was shot to pieces and so was useless, but a third was secured in fine condition - a yellow one with black feathers.

May 3, 1924. At this time I found that the coolie at home had left out all my ammunition I had told him to put in, so had to hire a messenger and send him to Suifu after it. Reached Muh Jiu Piu. Killed a pretty yellow bird with black. Killed another bird. A Chinese caught it by the tail and pulled all the feathers out, spoiling it.

May 4, 1924. Reached Li Tuan Tsang.

Shot one bird yesterday with the shotgun and blew it to pieces, so that it was useless. Another was wounded, but a Chinese caught it by the tail, and all the tail feathers came out. I turned the bird loose in the woods. At Li Tuan Tsang killed a bird with bright blue bill, bright blue eyelids, and a brown tail with two long feathers and short ones. Body slightly bigger than a sparrow. Wing brownish red, head shining black - probably a flycatcher. Went on six miles to Nyan Lin Chiao.

SHINY

NGAN

May 5, 1924. Went to Tong Fo Gin, about twelve miles south of Nyan Lin Chiao. Killed three heron, white, with yellow on necks and backs. One heron white on breast, dark blue on back, etc. Total of six birds. Found coolie did not put in any arsenic!! One brown bird, probably a flycatcher, secured an uncommon butterfly generally found on oak leaves.

May 6, 1924. Went to Tsang Lin Shien. Very hot. Killed four birds, only two useful.

Was invited to hunt leopards, and assured that they could be found. As I had only the shotgun and the gamegetter, which is single fire, it did not seem to me wise to tackle leopards.

May 7, 1924. I expected to go further south to the high hills where the aborigines live, and where there should be excellent specimens, but the official reported that a strong band of robbers was operating in that section, and advised me not to go. Killed two birds. Light rain.

May 8, 1924. Killed six birds. Caught a large turtle and some insects. The turtle was in a temple pool. The official confirmed the report that it was unsafe to go into the country of the aborigines.

May 9, 1924. Went to Kong Shien. Killed seven birds on the way. Got an uncommon butterfly. A cloudy day, threatening rain.

May 10, 1924. Got four birds, one rare, two uncommon. All good. Went to Shuin Gien Fu, 40 li or about 13 miles.

May 11, 1924. Went to Hua Tan Chiao. Secured a number of good insects, two birds, one a kingfisher.

Found a place in a grove where I saw and caught a number of rare insects. Saw one butterfly I never saw before, but he escaped. Caught a reddish frog that the Chinese say lives on the hills and mountains. Killed five new birds.

A warm day.

The Chinese everywhere have home-made shotguns and are killing many birds.

May 12, 1924. Travelled about 17 miles to Nyan Lin Chiao. Got several interesting insects, one new beetle, one new ant, one new butterfly, one new bird (new to my collecting). In all killed six birds.

Very hot.

The Skinner is cross because he has to stay up late at night so often to get done.

May 13, 1924. Travelled across the country to Muh Jia' Piu.2.

PIN

May 14, 1924. Travelled to Li Chuang. Got a sparrow hawk, colored a little like a plymouth rock chicken. Caught several interesting insects. A very hot, dry day. Travelled about 20 miles. Hawk had red eyes - or pink.

May 15, 1924. Arrived at Suifu. Took care of specimens - dried insects, etc.

May 16, 1924. Sent a netter for a month's intensive work south of Suifu. Some odd moths hatched out of coccons.

May 17, 1924. Mailed box No. 162, insects. A hot day. Caught a few insects.

May 18, 1924. A dry, hot day. Several moths hatched out.

May 19, 1924. Busy at home. Secured some curious bees. Mailed box No. 163.

May 20, 1924. Busy at home. Mailed box No. 164.

May 21, 1924. Several moths hatched from cocoons.

Looked over birds killed on the last trip. Some were
in good condition. Others were wrapped with the heads next
to the bodies, so that the feathers did not dry smoothly.
The rough travel south to Suifu affected some of these.

May 23, 1924. Mailed box 165. Collecting outfit previously used by Mr. Hoy arrived at 6:30. Brought them up to the house. Was busy until ten o'clock. Had to coax the coolies a great deal to get them to carry the loads.

Was vaccinated for typhoid.

May 24, 1924. Unloaded the boxes containing the collecting materials. Nearly everything in good condition. It is a fine collecting outfit, but a few things are the worse for wear. Guns in good condition.

Reported that a leopard was killed just outside of town after he killed one man and wounded two others.

May 25, 1924. Feeling "rummy" from typhoid vaccination.

May 26, 1924. Copied a list of collecting outfits in the Smithsonian account book.

Wrote consul.

Wrote Mr. Jones, thanking him for forwarding the collecting outfit.

May 28, 1924. Carpenters busy making insect boxes and birdskin boxes.

May 29, 1924. Busy at odd moments every day, getting acquainted with the collecting outfit.

May 30, 1924. Tried out the twenty-two rifle.

May 31, 1924. Received a lot of insects from my collector Ho at Chengtu.

June 4, 1924. Collector Chen returned from a 20-day trip to the district south of Suifu.

June 5, 1924. Collector Chen departed on another trip west of Suifu, searching for a swallow-tailed day moth or butterfly I saw west of Suifu near Shih Chi on the Yangtse River, about 80 miles west of Suifu, a very small town.

Tried out the big high-power rifle.

June 6, 1924. There's no excuse for my not getting some big game with this fine high-power rifle, - just what I've wanted all the time to make some of these leopards, etc. hunt their holes.

Prepared two insect boxes for shipping.

June 7, 1924. Cleaned all the guns, and oiled them. Had a boy fish all day, but he caught nothing.

June 8, 1924. Vaccinated the third time for typhoid.

June 9, 1924. Looked over medical kit - added the few medicines still lacking. Began to pack for the mountains. Carpenters have been busy about two weeks making boxes in which to ship insects and other specimens.

June 10, 1924. Received telegram, "Washington, D.C. Re. David C. Graham, Suifu, Szechuen. Songpan trip outlined your letter March eight approved letter follows. Ravenel."

Today my coolies have been busy reciling the cil sheets for summer use on the collecting trip.

June 11, 1924. Packed boxes 170 and 171 for mailing. Coolies ciled the cilcloths for the summer trip.

June 17, 1924. Mailed boxes 172, 173, containing 52 birdskins.

June 21, 1924. Mailed box 174, insects. Busy packing for the trip to Songpan.

June 22, 1924. Got on the boats. Ready to start for Kiating.

June 23, 1924. Started at daylight. Travelled 24 miles. Killed several birds, none new. Secured a few interesting insects. Tried out one of the new shotguns. It will take practice before I can use it as well as my old Winchester repeater.

June 24, 1924. An early start - boats turned tail on a rapid and went back about one-half mile. Reached Kan Beh Sou. Wounded but did not get a bird that I had not secured before. It was in a damp place where snipe might be expected but was not a snipe.

June 25, 1924. Heavy rain during the night. Boats started late. Reached Ma Lin Tsang.
Several birds. Wa Lin

June 26, 1924. Reached Chien way. The boat had a hard pull over the rapid.

Light rains all morning.

June 27, 1924. Reached Tsu' Ken' Tan'.

A very hot day. Killed a yellow necked crane that was standing on the back of a water buffalo.

June 28, 1924. A very hot day. Killed bird No. 1 and No. 2 on the fly. Both act like swallows, and both are not very common. No. 1 stays near the water. No. 2 flies high. I saw about a dozen in all of No. 2 flying high in the air. These were near the river.

June 29, 1924. Started my wife and four children to our bungalow on Mt. Omei then returned to Kiating, and started for Songpan. Spent the night in a dingy room where the only light came from dirty glass tiles overhead and where the only air squeezed through cracks, the best room I could find.

Sent two necessary telegrams to Chengtu re the Songpan trip.

June 30, 1924. Rained most of the day. Travelled about 26 miles to Tsang Jia' Kan³, a small village, All the crew were very tired, as they are not yet hardened in. Secured six birds. Had an armed escort of four men. Tried shooting the 45 automatic revolver. It shoots fine. Secured some good insects.

July 1, 1924. Last night up late with specimens and cleaning guns. Rained very hard during the night. Roads very bad in the morning, but made at least 35 miles. Afternoon hot. All arrived very tired at Shin' Gin' Shien⁴. Killed another bird like bird No. 1. Saw a lot of birds like bird No. 2 on an island. Wounded one, but did not get it. Bird No. 30 new to my collecting. Got a good many insects. Passed a robber district. Got birds 30, 31, 32.

July 2, 1924. Travelled about 28 miles to Chengtu. Secured two birds that conceal themselves in the rice paddies. Made preparations for the trip on to Songpan. Stayed at Geo. Travels's: FRANCK'S

Got birds 33, 34, 35, 36, 37. Consul Ogden, English, secured escort. Nos. 33, 37, 34 generally seen in rice paddies; 33 and 37 are hard to get.

July 3, 1924. British Consul Ogden sent a special paper requiring cooperation of Chinese officials. The escort was very slow coming, but when it came, not one of the soldiers had a gun or a sword, and there were eight of them? What use were they? At the city gates we were delayed an hour by the city police. Travelled eight miles. Secured four birds. All our party was still tired because of the rush trip from Kiating to Chengtu. Secured some good insects in the city of Chengtu, 38-41.

July 4, 1924. Today was a day to discourage the bravest. Travelled over 28 miles to Kuan Shien, a large city where I knew no one. Escort was sent ahead to get a lodging place. He did not do so, and we found ourselves on the streets helpless. I went to the Magistrate's and found he was from Suifu. He found a lodging for us, and arranged for our journey. Soldiers watching the city gate made trouble when we entered the city. My room was vermin ridden with poor air. One helper nearly raised a riot by unwise words while the loads were on the street and I was seeing the Magistrate. I had to dismiss this helper because he is always making trouble.

July 5, 1924. Crossed the Yangtsi P'o or wild geat pass to Yin⁴ Shin⁴ Wan, a small village. We had a hart time getting started. The coolies all worshipped the idol Er³ Jarg² fui fah, to insure a safe journey. The pass is about 3000 feet above sea level but very rough. This town is about 3200 in altitude. We killed 11 birds and secured a number of good insects. We saw a caravan of aborigines camping. Killed birds 40-53. This country is getting more and more like that around Tatsienfu.

LANG DIO

July 6, 1924. Travelled about 20 miles. Secured some fine insects. I forgot it was Sunday, or rather thought tomorrow was. Wild boar and a bear were seen across the river, and mountain goats or wild goats. Finally we saw the wild goats across the river. I raised the sights the first time, but overshot. Then I lowered the sights and still overshot. The third time Mr. goat came rolling down the steep cliff. I had to hire two men to cross the river on a rope bridge, there being a single bamboo cable, cross a very wild and rough stretch of country to the goat and bring the goat to me. This delayed us so that we reached the tavern after dark. The goat is gray and weighed 48 pounds. Killed birds 54-60.

July 7, 1924. A hard day's trip. The road was rough. The country had a semi-arid appearance with few birds and insects. All were quite tired when we reached the inn.

Birds 61-63, No. 61 was a cuckoo that I did not number, thought otherwise labelled. Got lots of interesting snails.

July 8, 1924. Travelled nearly 30 miles - a rather rough road, semi-arid country. Killed nine birds but the tired skinners could not skin them all. Plenty of wasps and bees. Secured a small butterfly I'd never seen before. Killed three large swift swallows on the wing.

Birdskins 64-68.

July 9, 1924. Passed through Mowchow. Coolies were determined to stay overnight at Mowchow, but I succeeded in getting them to go on. Nearly every carrier smokes opium. My feet are quite sore. Plenty of wild animals are on the high mountains, but along the river where the road runs it is semi-arid with very few birds and insects and no mammals. Birds No. 69-74.

July 10, 1924. Reached Shih Ta Kuen, probably 22 miles - with some rough roads. We seem to have finished the semi-arid region. I saw the fist oguk caravans. They belonged to Shi Fan aborigines. Very few birds and insects in the semi-arid region we have been travelling through for several days. Birds 75-80.

July 11, 1924. Reached small town Su' Wan 20 li beyond Tieh Shi. Climbed from the semi-arid region to the higher plateau. Vegetation different. Big black ants disappear, big red ones appear. Saw a wild boar. Escert lost my official passport!! Lots of Chinese pheasants and cliff

no K notion

yak

pigeons. There were two hard hills to climb. Saw a number of insects I never saw before, and secured most of them. Birds 81-82.

July 12, 1924. A heavy rain during the night and early morning - a late start. Roads very muddy. Saw many pheasants. Reports are plenty of big game on the high mountains - white bear, musk deer, long-haired monkeys, etc. Saw a number of aborigines called Shi Jane. They look much like the Tibetans. Birds No. 83-86.

July 13, 1924. Travelled 90 li, probably 30 miles upstream. A wonderful district for insects, of which we caught many. Several butterflies I had not seen before. Secured a bird I had not secured before.

Shot a cliff swallow. Shot a female pheasant on the fly and blew its head off, so it was useless. In these higher, cool altitudes, lots of insects are found under stones where they hide from the cold. This is not the case in the lower altitudes of Szechuen. Saw several aborigines. Secured birds 87-97.

July 14, 1924. Arrived at Songpan. City is smaller than Tatsienlu and not a foreigner in it. Must have an escort when leaving the city any distance.

Birds 98-104.

July 15, 1924. A.M. Killed 32 birds before dinner. Some of them new. P.M. Killed 12 birds, one snake - three birds useless. Met local military official. Took pictures of Bo4 Loh⁵ Tsis³ (Heh Shien) aborigines. Rain in the afternoon. Waded in the water and caught cold.

Birdskins 105-142.

July 16, 1924. A. M. Secured 30 birds, also insects. Bought strawberries (wild). P.M. took care of specimens, took pictures of aborigines, etc. Write necessary letters. Met the Magistrate about hunting trips. Also met Militia officer. Caught cold. Official forbade travelling north or west but permitted it east.

Birdskins 143-171.

July 17, 1924. Prepared for trip to Whang Long Li; Yellow Dragon Temple, a little over 20 miles away eastward. Had dinner in a Chinese home. Took several pictures of aborigines. Went out after supper catching night moths.

fan

Shun?

Wreste

July 18, 1924. Crossed "Snow Mountain" pass, probably at least 14,000 feet high. It was very cold. We saw many strange birds. Killed a hawk and other birds. We saw a lot of strange butterflies. Settled down at Huang Long Si for two weeks of hunting. Everybody tired. Secured 18 birds.

Nos. 171-190.

(yes)

July 19, 1924. Trip to Yellow Dragon Temple.Wonderful sights on the way. Killed 37 birds, three mice, all useful. Spent part of P.M. taking care of specimens. Prepared for a trip up the high mountain after big game. No. 192-226.

July 20, 1924. Took a long hard trip to the top of a mountain about 14,000 feet high. Was looking for large mammals, but saw no signs of any. Secured some June bees and dipthera. It rained hard last night and sprinkled during the day. Killed 14 birds. Last night's moth catch was excellent, the best this summer. A cold day with no sunshine. Expect to take a trip towards the snow mountain tomorrow, an all-day trip.

Birdskins No. 227-240.

fine

July 21, 1924. Fine catch of night moths. A very heavy rain during night and morning, making streams rise. Spent morning caring for specimens. Killed 19 birds, two large hares. Searched in all directions for signs of large mammals, but found none. Birdskins No. 241-259.

July 22, 1924. Rained all morning. Tramped to the head of the canyon of the Yellow Dragon Temple. Could find few insects on account of the cold. Secured some good birds. Secured 31 birds and one mammal. Rained very hard in the afternoon. Could cath no day insects.

Birdskins 260-290.

July 23, 1924. Changeable weather. Sun shone between showers. Killed nine birds, two of which were useless, and a hare. Climbed a high mountain, then went through a thicket through which I had to cut my way. Practically no signs of mammals. This is a poor spot for collecting mammals. Birds No. 291-297.

July 24, 1924. A.M. No rain, but a hard, cold wind. We have had not a single day favorable for day insects. In the afternoon there came a sudden unexpected shower that wet everybody and everything. Got three good pheasants, etc., two mammals, small.

Birds No. 298-308.

July 25, 1924. Took a number of pictures of Yellow Dragon Gorge, aborigines, etc. Two hard climbs. Secured three more pheasants. Pack animals were expected but did not arrive. Sending a special messenger tomorrow. We have cleaned out most of the birds of this vicinity.

Birdskins 309-24. Killed one rabbit.

July 26, 1924. Spent much time caring for specimens and preparing to go to Songpan City, thence towards Chengtu. Pack animals arrived early. Secured some good insects.

Birdskins No. 325-327.

July 27, 1924. Travelled back to Songpan. Crossed two passes. Arrived early but very tired. Met the magistrate, who said that it was unsafe on account of brigands to go north or west. We will therefore go south and seek another good collecting spot. Killed 20 birds. Received the first letters from my wife and children for ten days. Rained on us just after noon. Magistrate refused to be responsible for my safety if I went west or north, where the best hunting grounds are, because of brigands.

Birdskins 328-348.

July 28, 1924. Made arrangement for carriers southward. A. M. 15 birds. P.M. killed a fish duck. Cared for specimens, etc. Secured some insects. Felt under the weather. Birds 349-364.

July 29, 1924. Feeling better, but one collector is sick. Purchased large black pheasant. Its tail feathers were partly gone. This pheasant is found north and west of Songpan but comes down to Songpan in the winter. Getting ready for the trip southward.

Bird No. 365.

July 30, 1924. Travelled 70 li. Helpers were tired, so went no farther. Secured a snake and some good insects. P.M. climed a high hill after musk deer. Saw their tracks and signs of a bear. Stopped at Shin' Tang²Kuan'. A rain storm after dark. Visited Shi Gan home. Birds No. 366 - 373.

Fan

July 31, 1924. Travelled 80 li. Secured one squirrel and nine birds. A very hard wind in the afternoon made netting insects difficult. Travelled to Tsen⁴ Pin² Tsang², a small village. There are fewer birds here than at Songhan and Huang Long Si, or Yellow Dragon Temple.

Birds No. 374 - 382.

August 1, 1924. Travelled 70 li, about 20 miles. No birds, one weasel. A fine day for insects. Stayed for the night at Sa' Wan'. Heard that the Bolotsi aboriginies had attacked Chinese soldiers and defeated them. Guess Songpan official was right in forbidding us to enter their territory. Mammal No. 9. Spent night at Sa Wan'. J.1.

August 2, 1924. Reached Shih Da4 Kuan'. Secured some good insects, nine birds, and one small mammal. Occasional showers, and a rough road. Arrived tired. The fleas were terrible. Two birds were useless.

Birdskins 383 - 389. Mammal No. 10.

August 3, 1924. Made a long, hard trip of 90 li. to Mowchow. It must have been thirty miles, but doing so saves one day of travel that we can use in collecting. We will make eight stages in seven days. Two birds that the skinners did not finish last night spoiled on account of the heat. We reached Mowchow at dark to find all the imms full of people. After a long time we found lodging. A very late supper. The country on the lower levels, near the road, is semi-arid land; has few insects excepting wasps and bees and, very few birds.

Birdskins No. 390 - 392. At dinner ate five Chinese

biscuits, two eggs, and some salt.

August 4, 1924. Travelled sixty li. A dry, arid district, with few insects and birds. A strong wind made it harder to secure insects. The snails below Mowchow are quite interesting. Mowchow is a little over 100 miles from Songpan, 360 li, 400 li from Chengtu or about 130 miles foreign. I have walked every step of the way since leaving Chengtu.

Bird No. 393. Weichour

August 5, 1924. Travelled to Neichow'. No birds worth FRES weekhows killing. Met at Neichow' Rev. Thomas Torrence, T. R. G. S. In his church is a foreign stove in which I was able to dry all my insects. He and I start tomorrow morning for Manchuan. Wenchuan One helper sick. Took pictures of Chiang aborigines.

August 6, 1924. Reached Nen2 Chuan' Shien. Fired two shots at long range at a mountain goat - did not get him. Repacked for a trip on the high mountains. Aborigine king has made arrangements to help me get the goods. Mr. Torrence, CRG, 5, P.R.G. introduced me to him. Dismissed unnecessary coolies. Bird No. 394. Left some boxes at Nen Chuan.

> August 7, 1924. Sick during the night. In the morning felt very weak and tried to vomit. Mr. Torrence kindly let me ride his horse 20 li. This rested me up. Then walked 40 li up a canyon to an aborigine settlement. On the way one carrier fell off the bridge into the swollen

stream and was drowned. My rifle, the Smithsonian tents and folding chair, and my folding bed were lost. Could find no trace of man or things. Allowed to stay in the magistrate's yamen, which is really a stone fortress. P. M. rained.

Birds No. 395-397.

coolie's

August 8, 1924. Secured ten birds. Eleven men searched the river all day and found the tents and the drowned collie's trousers. Secured a few good insects. No trace of the drowned man or the other things. The lost rifle could better be spared from the collecting outfit than any other one we have. The loss of the Newton high-power rifle or a shotgun would have been serious. I'm still weak but improving.

Birds No. 398 - 407.

August 9, 1924. The tents have holes in them caused by the rocks in the river. The tent bag is lost. The fleas are bothersome. Haven't had fruit to eat for several days. Climbed a high mountain to survey the country. Saw a black bear a long way off. Now have four hunters to help find mammals. Nine birds. Secured some good insects.

Birds No. 408 - 417.

August 10, 1924. Aborigine hunters tried hard to get a deer or a mountain goat but failed. We have decided to cut out that expense and secure any mammals we can by our own efforts and without their aid. Secured eight birds. There are many odd birds.here, but they are hard to get because of the dense thickets. I have not been able to secure fruit to eat. Bought some honey that looks like black water but tastes a little sweet. Can buy no milk here. Secured a lot of interesting flies. Not feeling well, but kept at work. Dead man's body found.

Birds 418 - 425.

August 11, 1924. Went upstream to a lamasery. Secured 23 birds, some of them new. Have decided to move near the lamasery and collect a few days. There are more vegetation, birds, and insects there. One tree squirrel mammal No. 11-13. Two animals that eat bamboo roots. Birds No. 426 - 449.

mammala

August 12, 1924. Moved up the canyon to a more favorable spot for collecting. More woods and shrubbery. Rain in the afternoon. Secured fifteen birds, one new variety, and one squirrel. Natives say that there are few small mammals in this section. Moon out every night, therefore poor success with night moths.

Birds No. 450 - 464, Mammal No. 14.

August 13, 1924. Secured 14 birds and three mammals, one a black deer, a tree frog and some insects. Birds here are getting thinned out. No pheasants or grouse. Some signs of wild mice, so have placed out some traps. Ate supper at an aborigine home. Am planning begin moving towards Suifu on the 15th.

Birdskins 465 - 478. Mammals No. 15 - 17.

August 14, 1924. A. M. Rain prevented operations. Sent head coolie to the city to engage coolies for the trip home. Secured 21 birds, two mammals. Today's collecting was in dense underbrush and sometimes on the side of the mountain. Nearly slid down once. I've probably misnumbered some of the bird specimens.

> Mammals No. 18 - 19. Birds No. 479 - 503.

Toai (?)

August 15, 1924. Moved back to Kuan Tsae. One skinner sick with chronic diarrhea. Secured two strange rats. one young animal, one black deer, nine birds. Worked till late at night caring for specimens. Could easily secure other mammals if I were to remain longer, but already have made arrangements to move.

> Birdskins 504 - 513. Mammals 20 - 24.

August 16, 1924. Moved to small town Tong2 Kuan' on the main road to Chengtu. Received today the letter of instructions from Mr. Ravenel concerning this trip. If I had waited for that letter I could not have taken this trip this summer. Received a cub bear as a present. He is quite small.

August 17, 1924. Rained practically all day, making travel difficult. The road was also rough. Stopped at Yin Shin⁴ Nan'. The cub bear is very active and mischevious. He bit my elbow once. Because of the rain we got few insects, but got five birds. The sick birdskinner is improving, but still weak. When I reached Chengtu I will have walked all this trip excepting about five miles when I was sick and was given a ride on Mr. Torrence's horse. Five birds, Nos. 514 -518.

> August 18, 1924. Travelled to Kuanshien. Took pietures of the rope bridge. Spent the night at the chapel with Mr. Hutchinson. A little tired, but feeling well. Rained in the afternoon. The Davis family and Mrs. Bowles and her children arrived after dark. Mr. Franck arrived before the others.

> > Three birds, 519 - 521.

mischevous

August 19, 1924. Travelled 85 li to Kao' Tientsi. A very hot day. Lots of mosquitoes. One bird. 522.

August 20, 1924. Reached Chengtu before dinner. Saw Dr. Humphreys and visited Brace, F. R. G. S. of the Border Research Society. Stayed at the home of the British Consul Ogden. Engaged boat for down river. Secured escort. Very hot.

August 21, 1924. Travelled as far as Pin² Shan. Wrote several letters. Slept and rested. Another warm day. The baby bear is getting quite affectionate. Saw many white egrets.

August 22, 1924. Reached Kiating and moved things from the boat to the chapel. Saw Dr. Crawford and Mr. Clark.

August 23, 1924. Walked 120 li to Shin Kai Si. Much trouble with coolies. A very hot day. Arrived just before dark. This day's walk was thirty-three miles, with a hard climb at the end.

Two birds, 523 - 524.

August 24, 1924. Very hot weather. Mr. Clark, who came up from Kiating today, fainted after reaching Shin Kai Si - the heat was too much for him. The helpers rested up from the trip, to work vigorously Monday and Tuesday. Tens of people came over to see the baby bear. Met lots of old friends after the church service. I certainly enjoyed being with my family again. The Mission has asked me to spend six months at Ningyuanfu, a fine collecting spot.

August 25, 1924. Visited friends, attended a community meeting and a committee meeting; family had a picnic supper. Picked over the summer's catch of insects at Shin Kai Si. Sent netter to work on the higher altitudes for about two weeks. Secured nine birds. Very hot.

Birdskins No. 525 - 534.

August 26, 1924. Another hot day ending in a thunderstorm at night - a fair catch of night moths. Secured fifteen birds (later one, 16 in all). The last four birds were skinned Aug. 27, P.M. and were about spoiled by the hot weather.

Birds No. 635 - 550. The skinners could not skin them all in one day and we were travelling all August 27, with no time to skin the birds till night.

August 27, 1924. Walked 80 li to Suchi, and took a boat 40 li on to Kiating. Spent the night at the home of Rev. A. P. Juentin, an author, and a member of the West China Border Research Society. Mr. Juentin helped secure a boat. Heard that the English Consul was robbed above Zachow, a road over which we passed last year.

fully

ninggreenfin

535

Question

Corner O'The

August 28, 1924. Spent the morning getting the things into the boat. Many small delays. Such delays and bothers are coming on in China and one of the worst bothers. A thief got into the compound where he probably thought I was, probably trying to steal the Smithsonian guns. I had taken the guns to the house where I slept.

August 29, 1924. A very hard rainstorm and driving wind during the night. Reached Suifu about noon. Found many duties awaiting me. Cared for insects between other duties. Killed a large stork but it was poorly skinned.

Bird No. 535.

August 30, 1924. Conducted one marriage and two funerals and held interviews, and between acts packed 27 boxes of specimens for the Smithsonian Institution. These must still be sewed in sackcloth and labelled.

August 31, 1924. Conducted enother funeral. Slept most of the afternoon. Read some. This is the laziest day I have spent since leaving Suifu for Songpan.

On Sept. 1st I had 47 boxes of specimens filled. There are two collectors at work on Mt. Omei, whose collections are yet to come in. Collector Ho has been working around Chengtu, Kuanshien, and Behludin for four months and none of his specimens have yet arrived. The Songpan and the entire summer catch is bigger than last summer's catch.

September 1, 1924. Packed all my specimens that are on hand excepting three mammal skins that were not well dried and the stork killed Friday. There are about 570 birds for the Smithsonian Institution. Rats partly spoiled a bird specimen, so I packed the rest in boxes.

September 2, 1924. Practically spent all day wrapping the 48 boxes of specimens on hand. Spent the evening going over the Songpan account. Several letters from the U.S.A. and one from the Smithsonian Institution.

September 3,1924. Wrote several letters, looked after painters, labelled specimens of boxes.

September 4, 1924. Walked to Shin Tsang to conduct a wedding, 70 li. Killed six common birds. Hunted for rabbits or hares, but found none. Saw Beh Sou Chi where about 100 houses were swept away by the Yangtse in high water.

September 5, 1924. Walked 30 li to An Bien before breakfast. Three hundred houses were inundated at Nyan Bien (An Bien) of which about 170 were swept away. Eight birds, 536 - 543.

September 6, 1924. Spent most of the day labelling specimen boxes. Got them practically all labelled.

Mr. Franck of the Century Magazine arrived - a traveler and author, who has been through Yunnan and Szechuen.

Mailed four boxes of specimens.

September 7, 1924. Took a walk over the hills with Mr. Franck.

September 8, 1924. Work around home, lots of Mission business.

September 9, 1924. Mailed several boxes of specimens by parcel post.

September 10, 1924. Mailed four boxes of specimens.

September 11, 1924. Filled up two more boxes of specimens secured at Mt. Omei.

Mailed four boxes of insects by parcel post.

September 12, 1924. Received another letter offering to purchase all kinds of specimens at good prices.

Mailed one box of specimens, insects, by parcel post.

September 17, 1924. Sent netter Chen with nets and traps to collect and trap for about a month on the Yunnan Border, three days' journey south of Suifu on the high mountains where Chuan Mian aborigines are found. I may keep him working there until it gets too cold. I will go in for a short visit later.

September 18, 1924. Mailed the last of the fifty boxes of specimens secured during the summer. All the specimens are now on their way to the National Museum, excepting those caught by the netter Ho - which will reach me later and which he secured near Chengtu and Kuanshien.

September 20, 1924. My wife had a nervous breakdown. She will recover slowly.

Miao

September 21, 1924. Word has been received that Kaeichow troops have come to the Yangtse River at Ho Kiang, between Sucheo and Chungking, west of Chunking, to open hostilities against Szechuen. They fired on two steamers on the way up. During the next few weeks I shall probably continue to congratulate myself that the Songpan catch has all gone down the river and will soon be safely out of China.

EXPENSES

April 21, Hunting trip		April 17,	two box insects (registered) mailed, 98¢		
April 22, Nine birdskins (skinning)		each -	990 ME WE 1996 1996 ME WE	\$ 1.96	
April 22, Nine birdskins (skinning)		April 21,	Hunting trip	.04	
April 22, Nine birdskins (skinning)					
April 23, Two letters					
April 23, Skinner for skinning a mouse					
April 24, Mailing 15 packages - 46.16 April 25, Skimmer, skimning two mice . 14 Registered letter Mr. Ravenel . 20 Unregistered letter Mr. Ravenel . 11 April 28, Skinner, one bird		April 23,	Skinner for skinning a mouse	.07	
April 25, Skimmer, skinning two mice					
Registered letter Mr. Ravenel					
Unregistered letter Mr. Ravenel					
April 28, Skinner, one bird					
One letter, foreign, Kiating		April 28,			
May 3, Paid Lo on travel	Lavoaren		One letter, foreign, Kiating	• 04	
May 3, Paid Lo on travel	annual .	April 29,	Ropes for tieing bird boxes	.27	1.
May 3, Paid Lo on travel		April 30,	Mailed box of insects	1.22	
May 4, Paid Lo on travel					
Paper and strings					
Boy for climbing tree to get a bird					
Arsenic and cotton 1.50 May 10+16, Netter, for travel and food 1.80 May 1-16, Netter, for wages 2.24 May 17, Skinner, for skinning 49 birdskins - 4.10 One ball twine 2.5 Two white sheets for night work - 2.60 One new net 1.00 May 17, Two letters Consul, Customs Office - 10 May 18, One letter, Mr. Ravenel - 10 May 18, Short trip, boat Mong - 03 May 18, One-half expense of 16-day trip netting 49 birds					
May 10-16, Netter, for travel and food			Arsenic and cotton	1.50	
May 1-16, Netter, for wages		May 10-16			
May 17, Skinner, for skinning 49 birdskins - 4.10 One ball twine		May 1-16,	Netter, for wages	2.24	
One ball twine					
Two white sheets for night work 2.60 One new net 1.00 May 17, Two letters Consul, Customs Office 10 May 18, One letter, Mr. Ravenel 10 May 18, Short trip, boat Mong					
One new net 1.00 May 17, Two letters Consul, Customs Office10 May 18, One letter, Mr. Ravenel10 May 18, Short trip, boat Mong03 May 18, One-half expense of 16-day trip netting 49 birds15.25 May 18, Skinner, for skinning two birds14 May 18, Shipping box No. 16298 May 18, One lb. cotton			Two white sheets for night work		
May 18, Short trip, boat Mong	for a		One new met	7 00	
May 18, Short trip, boat Mong	metrice"	May 17,	Two letters Consul, Customs Office	.10	
birds		May 18,	One letter, Mr. Ravenel	.10	
birds	money	May 18,	Short trip, boat Mong	.03	
May 18, Skinner, for skinning two birds	Howard	May 18,			
May 18, Shipping box No. 162		77.		15.25	
May 18, One 1b. cotton 1.00 May 20, Letter to Chungking about collecting bills .05 outfit May 20, Mailed box No. 163 1.56					
May 20, Letter to Chungking about collecting bills May 20, Mailed box No. 163 1.56			Shipping box No. 162		
May 20, Mailed box No. 163 1.56		,		1.00	
		to the second second	The state of the s	.05	outtil
May 20, Purchas of fish 60				1.56	
		May 20,	Purchas of fish	•60	

,			7 77 (3	
	May 21,	Box 164 \$	1.32	
, alle	May 21,	Box 165	1.56	
05	May 23,	Carriage for collecting outfit to house	2.70	
C.	May 26,	Box 166	3.54	
		Two letters re collecting outfit	.08	
	Morr 28		1.32	
- 600	May 28,	Chan on collecting trip	4.00	
Commerce At and and	* 3	Letter, Mr. Ravenel	.15	
	June 1,	Wire for netting	.24	
,	June 1,	Wire for netting	3.20	
chem	May 28, June 1, June 1,	Chan for collecting trip		
	June 6,	DOX 100. LUSEUS	. 98	
	June 6,	Box 169, insects	.98	
	June 10,	Box 170, turtle	3,30	
	June 10,	Box 171, fish, shrimp & hook nails for boxes	• 09	
		Insect and bird boxes, lumber for new boxes	10.22	
		Carpenter work, new boxes	4.86	
		Now ail chaste	8.51	
1 2 mayor for	12 @ 25¢	Oil for oil sheets & catties @ \$2.54	3.00	
14 6 6		Check to Ho, collector, at Chengtu	10.00	
	Tuna 17	and the state of t	.07	
	June 13,	Telegram for films	.90	
		Telegram for firms old ones -	9.20	
		Ten boxes for travel also repair old ones -	.07	
		Skinner, one bird	e U !	
	June 14,	Pencils and gifts for use on Songpan trip	7 70	
		with officials	1.39	
	June 14,	Soap as presents for officials (whose aid		
		is sought)	2.37	
	June 14,		.72	0.03
		Ropes for boxes, etc.	1.50	1.80
	June 14.	Advance on collector Ho's wages to June 23-	5.00	
		Total to date	119.51	
		SONGPAN ACCOUNT FROM HERE		
	<i>A</i>	SUNGIAN ACCOUNT PROM HISTOR		
	oft, and had	7-4 1 70 (0 F) 1 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	60	
	June 17,	Box 172 (25) birdskins	.60	
	June 17,	Box 173 (27) birdskins		
	June 17,	Purchases pheasant skin	. 30	
		Leggings for aborigine hunter	.30	
		Two letters to Chungking re birdskins, etc.	. 10	
		Wire for netting	.21	
	June 21,	Wire for netting Box 174, insects	.98	
	June 23,		.41	
		Netter food 3 days	.42	
		Food of five helpers to Kiating	4.00	
•	Ber. Sh	On fourth of the entire cost of boats to		
	ONE	Kiating	15.00	
		124 W O TITE		

June	28, Food of helpers June 28 \$ 1	.00
June	29. Food of helpers June 29 1	.00
	Three tolograms June 29	.71
	(one dollar & 71 cents)	
June	30. Food of helpers 1	.00
June	30, Escort 2	.27
June	30, For wheelbarrows and sedan chairs for the	
	Chinese and me to ride in 1	.25
June	30, Inn money	.13
July		. 34
	Escorts 6	. 50
		.00
	Two servants' food 1	.07
	Chairs, wheelbarrow rides, etc	. 30
July	3. Box 175. insects	
July	3. Baskets	. 38
	12 bottles formalin @ \$1.50 18	.00
	Messengers, etc 2	.00
	Carrier Coolies to Chengtu 33	.65
	Kerosene 5	.30
July	3. Coolie carriers 24	.00
July		.00
mins July		.14
	Inn money July 2	.13
acet	Advanced on food cost cook 1	.00
Com	Advanced servents travel	.50
		.10
		.00
July		.20
e e		.08
. 1	Escort money 3	• 50
Coolie July	4. Collie's wages 6.00 6	.00
	Food of collectors 1	.25
		.00
July	5. Inn money	.45
Laolo	Travel of Loo for trip to Suifu 2	.00
James College College	Escort 1	.00
		.07
	Coolies wages 10	.00
July	6. Coolies wages 7	.00
morentain)		.20
am	ESCOPE AND MEN MAN MAN MAN MAN MAN MAN MAN MAN MAN MA	.14
Mean		.13
July	7 Escort 3	.20
		.97
	The money	.20
	Tottor Mr. Porronal	.10
coolie	Collies wages 7	.00
C 0000	And the second s	
	Total \$58	.49

July 8, July 8, July 8,	Collector's food Escort Carriers' wages	\$ 1.21 1.00 8.00
July 8,	Inn money	.23
July 9,	Food of helpers	1.27
oury og	Escort	2.00
	Inn money	.16
	Carriers of loads wages	7.00
	Ride for two helpers	.47
	Kerosene	. 34
July 10.	Inn money	.16
o orang	Carriers of Loads	7.00
	Food of helpers	1.27
July 11,	Inn money	.16
	Carriers of loads	7.00
	Food of helpers	1.28
July 12,		.16
	Carriers of loads	7.00
	Servants	1.28
		\$46.99

NOTES ABOUT SPECIMENS, ETC.

Suifu, April 14, one specimen with yellow above the tail, new to my collecting, also one very small bird that was poorly skinned. The other birds killed were all common. There are several kinds of small birds which I will probably not send specimens of in the future, since the Smithsonian Institution probably has all it wants.

The hawk moth caught about April 12 is not overcommon in Szechuen. I have put it in a shoeblacking box, tin, for safety.

May 1st, I started on a trip south of Suifu. I gave in charge of my coolie the box containing arsenic with instructions to send it along. He did not do so, and I did not find this out for several days, until the arsenic ran out. I had to purchase Chinese arsenic, which may be of inferior quality, and I fear the skins caught on that trip may reach the Smithsonian Institution in a damaged condition.

Suifu, June 2nd, found the nest of an ant that I had been unable to find a nest of before, with eggs, etc. Did not find any winged ants, but found eggs. These ants have a bad sting that one does not care to experience a second time. They are black ants, and the specimens are in a small bottle.

island

July 1. Saw a lot of birds of the kind numbered bird No. 2 on an island. Wounded one, but it fell on the plane and we couldn't get it.

July 3. Took my first picture with the Smithsonian kodak. It was of four people, one Chinese and three aborigines, a Rong, a Chiang, and a Chuan Miao. This first picture was a failure.

I took no coffee, tea, candy (except some chocolate), cookies, cake, or the like with me, expecting to "live off the land" a good deal. I rode no horse and took no sedan chair, planning to cut expenses by footing it as much as possible.

On this trip I had to practically run a dispensary every day to keep the coolies and helpers in condition.

July 4th - This was certainly a day ending in a nightmare, and one not familiar with things Chinese would have been up against it. My helper that was constantly making trouble with his tongue almost raised a riot by unwise words, which might have resulted in roughnecks stealing our guns while my men were unprotected on the streets. My visit to the magistrate straightened things out for several days to come. A generous present to this official counted not a little in settling all these difficult matters. Such is life in West China, and such is collecting here, but I am very glad to do it - in fact, I like to.

I had sent word to the netter, Ho, to meet me at Chengtu but he did not do so, so I will have him net around Kuan Shien and Beh Luh Din where there are many insects I have not yet caught. Firing the coolie who rows so much leaves me short two collectors, but I'll aim to make up for it by using natives in the interior.

This morning I broke the best glasses I brought along with me. I left them on the table. Probably a rat knocked them off onto the ground, and I stepped on them when I got up this morning.

My feet got sore today, but there are no blisters, so they will be all right tomorrow.

I left safely put away at home in Suifu most of the traps, the newest double-barrelled shotgun, fully half the collecting outfit, and most of the ammunition. This was 1, to save expenses on this trip everywhere possible. 2, So that

even if the whole outfit I have with me were lost, I would be able to go right on collecting. I also left the automatic 22 rifle at home, bringing another higher power small rifle of my own instead. Note. This was later lost.

We start every day at daybreak and sometimes are up until eleven o'clock or later at night taking care of specimens. This means that we generally get too little sleep while travelling.

July 7. The mountain goat killed yesterday kept us up till very late, so all were very tired today. In addition, we had a long hard journey over rough roads. The country was semi-arid with few specimens. The fine spirit of my Chinese helpers is a great comfort. They work hard, do anything, and do not complain. Two of them are our family table boy and our coolie, the skinner, and the third is the netter Chen². Number four is an aborigine, a Chuan Miao, whom I am putting through school. He is a fine hunter and he and I are the hunters. I also have a net alone and net insects and catch any reptiles, etc. that I can.

alono

This Songpan trip is a hard trip. I may not see a foreigner until I reach Chengtu again.

July 8. Because the cablegram from the Smithsonian Institution reached me so late, the time for this trip is too short and I must make every day count. I have not lost a day of travel, even on Sundays, since I left Suifu. For that reason all of us are tired but do not intend to stop. This territory is so interesting that there should be a much longer time for the trip, but we will do everything we can. I think we will secure specimens not found in other parts of Szechuen.

This is probably the lonesomest collecting trip I shall take, for I shall probably not see another foreigner until I reach Chengtu.

July 10. Small birds 75 - 78 were noisy but hid in low underbrush.

We are just passing out of the semi-arid region with few birds and few insects to the interesting higher region, with birds, insects, and all kinds of game.

Lots of fleas.

I walk all the time while collecting.

1. to save expenses.

2. Because I can be on the alert and collect specimens better.

3. It hardens me for the hard climb coming later.

From Chengtu to Songpan is a rich district for collecting. One wishes he had years in which to do it. White bear and all kinds of animals are reported.

This road is very safe this year so it is well that this trip was taken. The trip might be impossible next year, and for some time afterwards. However, two foreigners were murdered last year by robbers, and the officials were punished so that the officials were unwilling for a foreigner to go where there is any danger. The Songpan magistrate forbade travelling westward or northward but permitted travelling one day eastward where collecting should be very good.

The city of Songpan has very little vegetation excepting wheat fields, so it would not be profitable to stay here long and collect, especially since the officials do not want us to go far away from the city. Next year it might be impossible to come at all.

The local official is anxious for me to clear out of this district. If anything happens he will be held responsible. This is bound to shorten my stay at Songpan.

Some of the Chinese at Songpan use prayer flags on their houses like the Lamaists of Tibetand The new flags

I saw a Chinese baby boy whom the parents wished to protect from evil influences, especially demons that cause disease and death, on whose back the parents had a brass mirror, a brass corn charm, and a small bag in which some parts of the Buddhist classics were placed.

July 17. The local magistrate tried to get me to make my stay in this district quite short. It was with some difficulty that I secured a longer time in which to collect at Huang Long Si? - Thope to find ways of delaying long enough to get a reasonable amount of collecting done. The official will not let me leave the main road along the river for the higher elevations where mammals and different kinds of birds may be found.

July 18. At Huang Long Si I saw a number of strange birds. There are plenty of trees and there should be plenty of game. The official would not let me come here without an escort of six soldiers.

July 18. Bad luck - I received two pounds of gunpowder from the arsenal at Chengtu for this trip, but it is false powder and will not explode. This will leave us short of ammunition for small birds.

July, 23. We have searched in every direction and find that this such a poor place for large birds and for mammals that we are going to spend a couple of days at the city of Songpan, then move towards Chengtu where we believe conditions to be much more favorable for large birds and mammals. We have a good catch of night moths and of small birds. If we could go west or north of Songpan, we would find plenty of large birds and mammals, but the Heh Shui Bolotsis aborigines are such brigands that the officials will not permit us to travel in those directions. We have not only enquired here, but have actually gone in every direction before being convinced that this is a poor place for mammals and large birds.

We have found only two kinds of grouse or pheasant here, besides the omnipresent Chinese pheasant. It is black, or at least dark, and lives in the dense woods, and is very wild. We secured one good specimen, and killed a second. The latter fell from the top of a tall fir tree on a steep, muddy incline. It rolled a long way down the mountain, and when we found it, there were not enough feathers left on its body to make it of any use as a specimen. The above notes refer to the district about the Yellow Dragon Temple, about 24 miles northeast of Songpan, with an elevation of about 12,000 feet, probably, the lowest elevation is about 12,000 feet, the highest being on the nearby mountain peaks where there is perpetual

July 26. This Yellow Dragon Gorge is wonderful from the points of view of scenic beauty, geology, and the study of nature religions - also anthropology. Two tribes of aborigines come here on pilgrimages to worship and I have secured some pictures for Dr. Hrdlicka. The water of the creek comes down from the snow mountain carrying a mineral substance that is being deposited all along the gorge, so that the creek is not carving a deeper route, but actually rapidly building its bed up higher and higher. Leaves, twigs, and logs are being rapidly covered up. The mineral substance when deposited becomes a bright yellow stone, so that the bed of the stream is a bright yellow color. The water flows slowest at the edge of the stream and there deposits its mineral, so that it tends to build banks to the stream. In many places the stream is from five to thirty feet above the surrounding ground or rock, and the lower delevations are generally old beds of the stream that have been deserted. Probably, the stream builds itself higher and higher above the neighboring soil or rocks until, in some freshet, it breaks over its banks and seeks the lower level, which is for a time the stream bed, and which is gradually built up by the

mineral deposit until, in turn, it is higher than the last bed that it has left. I am sending samples of the yellow stone, some with leaf or twig imprints. (See pace 265).

Total cost of coolies Chengto to Songpan \$166.00 wages.

SONGPAN ACCOUNT Continued

	July 13,	Carriers	\$ 10.00 66.00
		Inn money	.16
	July 13,		1.30
	July 14,		.14
	o vising	Helpers	1.44
		Telegram	.73
1		Straw sandals	.67
		Escort	3.00
	July 15,		0.00
	July 16,		
	4	Helpers 4 w 4 oo	
	3,00	Tsang 3. w	3.00
	7000	Pack animals 10. 2	10.00
	The state of the s	Equipment -	.97
	and the state of the same	Honey for might moths	. 20
St.	and the same	Equipment	.14
	July 18	Pack animals	11.27.
	o chair y all o g	TOOL CITTURE TO	\$109.02
			\$109.02
	L. a. e.	Law Tsang advance	7 00
casl		Law Li 1 00 cost?	3.00 1.00
3	LAND COSK	Cook on acct	
cook hi	July 18	Law Tsang advance	4.00 2.00
		Gave escort	3.00
		Gave escort	3.00
	July 23,		•50
	July 23,		
	July 26.	Escort	4.00
	July 26.	Li	• 50
		Tsang	.50
		Boxes for specimens	1.07
	July 27,		11.13
	J. C.	Escort	13.00
		Servants food	6.00
	July 28,		.20
	•	Li wages	1.47
.4		Letters mailed (bsns)	
to	action Caro	*Advanced to carriers	.18
		ANTO ANTICOM OF OCTATION OF THE PARTY OF THE	22.00
	July 28,	Purchased pheasant	\$77.38
	July 100g	Chen for inn money	1.00
		Cook on acct.	.06
			1.00

	a and the same	1 01 404		
	July 27	Owe Lao Chang 404		
1	July 29	Cook has on hand 7992 cash	-6	
Laro		Advanced Law Chang	\$ 2.00	
	July 30,	Cook food for servants	2.00	
	×	Gave escort	1.00	
		Cook food	.27	
		Snake, guide, etc	.10	
	July 31,	Gave escort	2.55	
		Sandals 250 cash	.80	
	August 1,	Gv. escort	1.00	
	* August 1,	Gv. coolies	2.00	0
	August 1,	(July 30, 1.27; July 31, 1.00; Helpers son-	2.27	Poo el
		Paner etc.	• 06	
		Inn money 2 days	.23	
		Helpers food, 1 day	1.00	
	August 2,	Recort	1.00	
	_	Inn money	. 14	
			\$18.48	
		Carried forward		
Lao	August 2,	Law Chang	1.40	
•	0	Eleven carriers	4.00	
		Helpers	1.00	
	August 3,	Imm money	.11	
		Helpers	1.00	
		Eleven carriers	6.00	
		Escort 1.00	7.31	
	August 4,	Inn money	.17	
		Carrier coolies	4.00	
		Helpers	1.00	
		Car Chance a man a	1.00	
	August 5.	Carrier coolies	2.00	
	· · · · · · · · · · · · · · · · · · ·	Inn money	.14	
		Helpers	1.00	
		Carrier coolies	E 00	n A 342
	August 6.	Carrier coolies	17.40	awe solo
	1.00	Gav. Chang	1.00	and it's
	John Librar West	Servants food	1.00	
		Straw sandals	. 34	
		Bear	1.00	
			\$55.87	
	August 7.	Aborigine messenger	1.00	
	August 8.	Coolies to date	13.60	
		Escort to date	1.27	
	1 0 0	Gav. Chang (owe him 20¢)	2.00	
		Recovery of tents (11 men)	2.00	
	August 9.	Six hunters	3.00	
	August 10	.Food for servants	1.00	
		Four hunters	2.07	
	August 11	One hunter	11.32	
	1	Gav. Chang 1.00	1.00	
	from the first			

Lao	August	13, 14, 15,	Fuel, water, etc	\$.65 1.17 .66 4.00 3.00 1.00 1.00 6.00 .64 1.50 \$ 47.88
	August	16,	Carriers to Soh Chian Escort	4.00 .40 1.00 2.00
Lao			Gav. Bai owe 1.00 to Soh Chian	1.00 1.03 4.00 1.00
			Coolies	5.00 1.00 .14 .15 4.00
	August	19,	Escort	1.00 1.00 .20 1.60
			Paid Fu' teo & coolies	24.70 4.00 4.20 1.00 5.00 1.00
,	August	21,	Baggage to boat	1.27 1.00 1.40
	August	22,	Boat	2.60

August 22, Cook food account 10068 cash \$ 2.92 Cook borrowed 5.00) Coolie borrowed2.00) to be repaid Chen 2.00) Jang 2.50)	
August 22, Coolie carriers Kiating 80	
Coolie carriers to Mt. Omei - 2.02 Food of helpers 1 on 2000 - 92	
Food of helpers ton 2000 92	
August 25, Advanced collectors 4.14	
August 26, Advanced collectors06 August 27. Advanced carriers 1.50	
August 27, Advanced carriers 1.50 Advanced boat 1.00	
Advanced boat 1.00	
August 28, Advanced carriers 1.18	
Advanced boat 5.26	
August 28-29 Food of helpers 40	
20-20	
Box 176, insects Box 177, insects	
Box 178, insects	
Box 179, insects	
Box 180, insects	
Box 181, insects	
Box 182, insects	
Box 183, insects	
\$ 26.18	
Box 184	
Box 185	
Box 186	
Box 187	
Box 188	
Box 189	
Box 190	
Box 191	
Box 192	
Box 193	
Box 194	
Box 195	
Box 196	
Box 197	
Box 198	
Box 199	
Box 200	
Box 201, bones	
Box 202, Rocks	
August 31, Box, big, 203 skins	

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Sept. 1,
        Box 204 fish frogs
         Box 205 snails
         Box 206 insects
         Box 207 fish frogs
         Box 208 snails, etc.
         Box 209 frogs, snails, fish
         Box 210 skins, bones, snake, frogs
Sept. 2,
         Box 211 one bird
                 Birds (No. 1)
         Box 212 fifty birds,(2).
         Box 213 (40) birds (3)
         Box 214 (25) birds (4)
         Box 215 70 birds (5)
         Box 216 33 birds (6)
         Box 217 50 birds (7)
         Box 218 3 birds (8)
         Box 219 85 birds (9)
         Box 220 50 birds (10)
         Box 221 70 (11)
         Box 222 12 mammals
         Box 223
                     insects
         Box 223 insects
Box 224 insects
         Box 225 3 mammals, worms, etc.
Sept. 2,
         Paid Skinners for summer work of skinning -
                                                   67.50
         Paid collector Zang for summer's work - - - 16.00
         Advanced for netter Ho for work about Chengtu 34.00
         Summer wages of netter, Chen - - - - -
                                                   9.00
                                                   $126.50
         Inn money Chengtu - - - - - - - - -
                                                     1.00
                                                   $127.50
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Songpan account ends here.

NEW ACCOUNT

· · · · · · · · · · · · · · · · · · ·	and the control of th
Sept. 3,	Letter, Mr. Ravenel \$.44
Sept. 3.	Letter, Mr. Ravenel \$.44 Other letters22
Sept. 4.	One box specimens98
Cant 5	Three horse of specimens 2.94
Sent 6	Four boxes specimens 3.92
	Transfer on the second of the
600	Loss on Exchange (out 200.w gold) 4.07
on \$20019	
Dence To	TWO DOVER HETTER
Sept. II,	Four boxes mailed 3.92
	Paid skinner moth catcher who worked at
	Shin Kai Si summer wages 2.00
Sept. 12,	Mailing two boxes birdskins in June from
	Chungking, see bill 5.04
	Six films for Songpan trip 8.45
	Packing materials 1.60
	Four packages to U.S.A 3.92
	Total 39.50
	Netter Chen expenses, food, & 3 days @
	Omei Shen
1	Netter Chen wages (overlooked) for May 16-
	July 1. 1924 6.00
Sant 12	July 1, 1924 6.00 Mailed package
and the same of th	Skinner 8 birds one bat73 Spotting boxes of baggage containing
Carlos States	bindships Suite the Chambai by James 16 40
0 1 25	birdskins Suifu to Shanghai by Lovegren - 16.40
Sept. 15,	Four boxes specimens 4.26
as segret of	11 boxes specimens to Chungking ?
	110 lbs. Birds 1 2 1.65
	Letters re specimens18
Sept. 16,	Four boxes specimens mailed 4.94
	Eleven bird boxes to steamer07
Sept. 18,	Ten boxes specimens, U. S. A 12.36
	One box to Yunnan for collecting40
Trus	Advance netter Chen collecting inf 6.00
	Four boxes mammal skins to Smithsonian Inst. 12.96
	Total \$ 96.73

Leaves, twigs, and logs are rapidly becoming covered up with the deposit which becomes yellow stone.

Because of the abundance of this yellow stone, the natives believe that a yellow dragon god lives in this gorge. Chinese and aborigines unite in worship. There are some very interesting things for one who is interested in the religious side of anthropology.

One reason that the officials of Songpan do not want anyone collecting mammals or insects is that they are devout Buddhists and believe in the transmigration of souls. It is about as bad to them to kill an animal, bird, or insect as it would be to kil a human being. However, it is really dangerous on account of the aborigine brigands to go north or west of Songpan, where, by the way, is the best hunting.

Ants. There are two small varieties that I have noticed that go up to about 14,000 feet. There is a large red ant found in Szechuen between the altitudes of 6,000 and 11,000 ft. The most common large black ant of Szechuen (central) is found below the level of 6,000 feet but not above. Question, do these two ants fight each other so that they can not live in the same territory, or do they simply seek different levels?

Insects above 7,500 feet often are found under stones but not often in the lower levels in Szechuen. Evidently they find under the stones some protection from the cold.

I did not find the wild small reddish turtle dove that I found at Tatsienln.

The escorts are a great problem. Without them the officials will not be responsible for your safety. If you pay them too little, they'll report to the magistrate. Sometimes they report that you have not paid what you should when you have to get the official to give them more money, but it hurts your reputation.

My Chinese helpers have worked mighty hard on this trip. It is hard on the skinners to walk 20 to 30 miles, then spend part of the night skinning birds. The netter often does not get enough sleep because of catching moths. All these helpers walk all the time unless they are sick. The loyalty of these Chinese helpers and the willingness to work hard will mean much in making this trip a success if it proves a success. All these helpers I have trained myself.

I saw at Tieh Chi, altitude about 8,000 feet, the large kingfisher of which I have sent samples from central Szechuen. I did not get a shot at it.

In the region of Songpan and Mowchow, and between, all the rock is lava - no limestone or sandstone - excepting the yellow stone deposited by the water in Yellow Dragon Gorge.

Ants. - Above Mowchow at a level of about 6,000 feet I saw both the large red ant and the large black ant on the same ground. They did not seem to be at war. This makes it seem probable to me that they do not fight, but simply and naturally seek different levels, the large black ant from about 6,000 feet altitude down, and the red ant from about 6,000 feet alt. to about 11,000 feet.

Aug. 5. It is a piece of good fortune I met Rev. Thomas Torrence, F. R. G. S. He knows this region, and will put me in touch with a king of the aborigines who is a great hunter. I must give this king a present to get his good will.

Aug. 7. I was sick this morning and still feel weak.

The drowning of the coolie carrier was unavoidable. The stream was swift and swollen. The bridge was three logs tied together with pieces of wire. Probably, these were rotten and gave way when the carrier tried to cross. I heard his cry for help, saw him floating rapidly down the swollen mountain stream. This was just above the village. We ran below the village and tried to head him off, but the only thing we found was a piece of the framework he used for carrying things on his back. This makes a sad ending for the day. No trace has been found of our things. These mountain streams can only be appreciated after one has seen them, many. Many of them are roaring torrents, especially in high water. The coolie had parents, wife, and children. I had healed his feet of bad stone bruises and we liked each other.

The Wasi aborigines have been brought to this territority by the Chinese from towards Tibet and placed or sandwiched in the midst of the Chiang aborigines to balance the power of the Chiangs and make them more easily governed. They have absorbed more of the social and religious customs of the Chinese than the Chiang, who have refused to absorb or be absorbed, and resemble the Chinese more closely.

Aug. 8. The accident yesterday was entirely unavoidable on our part. The blame is entirely on the part of those who look after that bridge for not replacing rotten thougs.

The piece of skull and the jawbone secured above Nen Chuan are probably of two individuals. Mr. Torrence, F. R. G. S. thinks they are of the Sui Dynasty, at least 1,000 years old. He thinks they were mummified. The skin and flesh did not rot but dried on the bodies. Mr. Torrence sent a specimen of a hand to the British Museum. This is a very dry spot, and either they were mummified or else they dried up instead of rotting. The coffins, well preserved, are of wood. There is no mark or inscription of any kind to indicate the age of the specimens. The bodies were intact when just discovered several years ago, but the natives have broken them to pieces with stones. I would like to know what Dr. Hrdlicka finds about these bones. Are they Mongolian, Aryan, or aboriginal in type?

Mammals. I do not consider my summer's catch of mammals an outstanding success. Near Songpan we were not allowed to go where mammals were plentiful. Where we went, a great festival which included hunting, had driven the large mammals away, and nearly cleaned out the pheasants. Near Nen Chuan there are large mammals, including a white and a black bear, and a long-haired monkey or ape, but every native is a hunter and the animals are exceedingly wild. I used to trap when a boy, but there are special things to learn about trapping in West China, and I am beginning to learn some of It might pay for me to train a native trapper and hire him throughout the year, taking him with me on these trips, for trapping takes time, and one of my problems is to get as much as possible done in a comparatively short time. If allowed to use money a little liberally I can hire native hunters and considerably increase my catch of large mammals.

Aug. 15. I was just getting into the swing of securing mammals when I left for Suifu. A month spent here in winter time ought to give excellent results.

Wilson, the great naturalist who spent eleven years in West China, had with him part of the time a naturalist who spent his whole time trapping mammals. People who knew him say that he had a great deal of trouble and lost lots of traps. The Chinese would continually steal his traps. He was constantly provoked by this sort of thing. Some of us who live

in China are sometimes inclined to think that "Honest John Chinaman" is a literary fiction, more legendary than real.

Aug. 28. It will be some relief of mind when I get to Suifu with my collecting outfit and specimens. Brigands, petty thieves, mold, rust, breakage by carriers, and wreckage of boats are some of the possible sources of loss. Last night a thief broke into a foreign compound in Kiating, probably hoping that he might secure the Smithsonian guns, which I had taken to the house where I spent the night.

After losing my folding cot when the coolie was drowned near Nen Chuan, I spread my blankets on flat boards. It would not do to use Chinese beds, on account of the fleas, bedbugs and lice.

It is about as much work caring for the specimens, labelling them, packing them, etc. as it is to collect the specimens. Under caring for the specimens I would include drying, wrapping, etc.

It was a wise thing to take the Songpan trip. It might be several years before that road is again as free from brigands as it is this year, and before the trip is again possible because there is no civil war in Szechuen. Now that the Mission has asked me to go to Ningyuenfu next spring, it is certain that I could not go to Songpan next year, although I could go to Moupin, probably. The Washan trip could be taken practically any year so that it may well be postponed until the other important trips are all taken. Washan is so near Mt. Omei that there is apt to be quite a close resemblance in the species found at Washan and those at Mt. Omei. Places more widely separated are more apt to produce a different variety of specimens.

OK

Sept. 18th. Already the warclouds are gathering over China, and there are rumors that the thunders of war will soon be heard in Szechuen. If there had been similar conditions during the summer I could not have gone to Songpan. I have hurried up the packing and shipping of specimens, and today the last box of specimens has gone off by parcel post. Here's hoping that they all get safely out of China before the Yangtse River becomes closed to steamer traffic and that none of the fifty boxes of specimens are lost or injured.

Sept. 21. Kueicheo troops have appeared at Ho Kiang between Suifu and Chungking, and have fired on the steamers. Steamer traffic may close at any time.

HO KIANG, between LUCHEO and Chungking.

Please offer suggestions as to how to make the diary more useful to the curators.

(Signed) D. C. Graham.

I shall appreciate information at any time about the specimens that have been sent in, especially any that have proven of special interest.

(Signed) David C. Graham.