

**THE UNIVERSITY
OF ILLINOIS
LIBRARY**

572.05
FA
v. 14

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

SEP 7 1978

SEP 1 1978

JAN 13 1979

SEP 1 1978

~~SEP 01 1999~~

L161—O-1096

FIELD MUSEUM OF NATURAL HISTORY

PUBLICATION 209

ANTHROPOLOGICAL SERIES

VOL. XIV, No. 2

UNIVERSITY OF ILLINOIS LIBRARY
DEC 8 1922

THE TINGUIAN

SOCIAL, RELIGIOUS, AND ECONOMIC LIFE
OF A PHILIPPINE TRIBE

BY

FAY-COOPER COLE

Assistant Curator of Malayan Ethnology

WITH A CHAPTER ON MUSIC

BY

ALBERT GALE

83 Plates and 26 Text-Figures

The R. F. Cummings Philippine Expedition

BERTHOLD LAUFER

Curator of Anthropology



CHICAGO

1922





MAP OF NORTHWESTERN LUZON.

LIST OF ILLUSTRATIONS

TEXT-FIGURES

	Page
1. Child's Cradle and Jumper	273
2. Diagram of a Game	277
3. Cross Sections Showing Types of Graves	287
4. Ceremonial Paraphernalia	312
5. Household Objects	366
6. Spoons and Ladles	368
7. Types of Knives	375
8. Head-axes	376
9. Spears	377
10. Shields	379
11. Chicken Snare	380
12. Bird Snares	382
13. Fishing Devices	384
14. Grass Knife; Root Adze; Rice Cutter	387
15. Agricultural Implements	391
16. Devices Used in Spinning and Weaving	418
17. Rope-Making Appliances	421
18. Bark Beater	422
19. Basket Weaves	424
20. Net Needle and Mesh Stick	427
21. Tobacco-Pipes	429
22. Designs on Pipes and Pottery	432
23. Decorative Designs	433
24. Patterns Used in Weaving	434
25. Blanket Designs	435
26. Musical Instruments	441

PLATES

- Frontispiece:* Map of Northwestern Luzon.
- I. The Province of Abra, Looking Inland from the Coast Range.
 - II. Abra, Looking toward the Sea from the Top of the Cordillera Central.
 - III. Manabo Man.
 - IV. Man of Ba-ak.
 - V. Manabo Woman.
 - VI. Woman of Patok.
 - VII. A Mountain Tinguian from Likuan.
 - VIII. A Young Man from Likuan.
 - IX. Girl from the Mountain Village of Lamaw (Photograph from Philippine Bureau of Science).
 - X. A Woman from Lamaw (Photograph from Philippine Bureau of Science).
 - XI. A Typical Small Boy (Photograph from Philippine Bureau of Science).
 - XII. The Baby Tender.
 - XIII. A Betrothed Maiden.

- XIV. The Wedding.
 XV. Mothers and Babies.
 XVI. Funeral of Malakay.
 XVII. The Whipping at a Funeral.
 XVIII. Inapapaiag. An Offering to the Spirits.
 XIX. The Medium's Outfit.
 XX. Ceremonial Houses.
 XXI. Balaua. The Greatest of the Spirit Structures.
 XXII. Spirit Houses in a Garden.
 XXIII. The Kalangan: A Spirit House; Second in Importance.
 XXIV. The Saloko. A Split Bamboo, in which Offerings are Placed.
 Ceremonies.
 XXV. The Saloko. A Spirit Bamboo, in which Offerings are Placed.
 XXVI. Ready to Launch the Spirit Raft on the River.
 XXVII. The Tangpap. An Important Spirit Structure.
 XXVIII. Gateway at Likuan.
 XXIX. Pottery Houses, for the Spirit of the Rice.
 XXX. A Medium Making an Offering to the Guardian Stones.
 XXXI. Ceremonial Pounding of the Rice.
 XXXII. Renewing the Offering on the Spirit Shield.
 XXXIII. Singeing a Pig at a Ceremony.
 XXXIV. Offering of the Pigs to the Spirits.
 XXXV. The Sayang Ceremony.
 XXXVI. Potters at Work.
 XXXVII. A Family of Laba-an.
 XXXVIII. The Village of Saliapadin.
 XXXIX. Typical Houses.
 XL. House Building.
 XLI. Roofing a House.
 XLII. Water Carriers (Photograph from Philippine Bureau of Science).
 XLIII. A Tinguian Housewife (Photograph from Philippine Bureau of Science).
 XLIV. A Warrior.
 XLV. Hunter Fitted for the Trail.
 XLVI. Hunting Party on Mt. Posoey.
 XLVII. Shooting the Blowgun.
 XLVIII. Highland Field and Terraces at Patok.
 XLIX. The Rice Terraces near Likuan.
 L. Plowing in the Lower Terraces.
 LI. Taking Rice Sprouts from the Seed Beds.
 LII. Transplanting the Rice.
 LIII. Bird Scarers in the Fields.
 LIV. Harvesting the Rice.
 LV. The Rice Granary.
 LVI. Pounding Rice (Photograph from Philippine Bureau of Science).
 LVII. Winnowing and Sifting (Photograph from Philippine Bureau of Science).
 LVIII. Drying Corn.
 LIX. Breaking the Corn between Two Stones.
 LX. Preparing Tobacco.
 LXI. Feeding the Pigs.
 LXII. A Typical Forge of the Iron Workers.
 LXIII. Ginning Cotton and Sizing the Thread.
 LXIV. Beating Cotton on a Carabao Hide.
 LXV. Spinning (Photograph from Philippine Bureau of Science).

- LXVI. Weaving a Blanket.
LXVII. Basket Making.
LXVIII. Basket Types.
LXIX. Basket Types.
LXX. The Net Maker.
LXXI. Ceremonial Blanket.
LXXII. Blankets Showing Designs.
LXXIII. Blankets Showing Designs.
LXXIV. Woven Belts and Clouts.
LXXV. Men of Sallapadin.
LXXVI. Typical Dress of the Man.
LXXVII. Women in Full Dress.
LXXVIII. Customary Dress of the Woman.
LXXIX. Women's Arm Beads.
LXXX. Woman Wearing Girdle and Clout (Photograph from Philippine Bureau of Science).
LXXXI, 1. Dancing Tadek at a Ceremony.
LXXXI, 2. Beating the Copper Gongs.
LXXXII. The Nose Flute.
LXXXIII. Playing on Bamboo Guitars.



THE TINGUIAN

BY FAY-COOPER COLE

INTRODUCTION

It seems desirable, at the outset, to set forth certain general conclusions regarding the Tinguian and their neighbors. Probably no pagan tribe of the Philippines has received more frequent notice in literature, or has been the subject of more theories regarding its origin, despite the fact that information concerning it has been exceedingly scanty, and careful observations on the language and physical types have been totally lacking.

According to various writers, these people are descended from Chinese, Japanese, or Arabs; are typical Malay; are identical with the Igorot; are pacific, hospitable, and industrious; are inveterate head-hunters, inhospitable, lazy, and dirty. The detailed discussion of these assertions will follow later in the volume, but at this point I wish to state briefly the racial and cultural situation, as I believe it to exist in northwestern Luzon.

I am under the impression that at one time this whole region was inhabited by pygmy blacks, known as Aeta or Negrito, small groups of whom still retain their identity. With the coming of an alien people they were pressed back from the coasts to the less hospitable regions of the interior, where they were, for the most part, exterminated, but they intermarried with the invaders to such an extent that to-day there is no tribe or group in northwestern Luzon but shows evidence of intermixture with them. I believe that the newcomers were drawn from the so-called primitive Malay peoples of southeastern Asia; that in their movement eastward and northward they met with and absorbed remnants of an earlier migration made up of a people closely related to the Polynesians, and that the results of this intermixture are still evident, not only in Luzon, but in every part of the Archipelago.

In northern Luzon, I hold, we find evidences of at least two series of waves and periods of migration, the members of which are similar physical type and language. It appears, however, that they came from somewhat different localities of southeastern Asia and had, in their old homes, developed social organizations and other elements of

culture radically different from one another—institutions and groupings which they brought with them to the Philippines, and which they have maintained up to the present time.

To the first series belong the Igorot¹ with their institutions of trial marriage; division of their settlements into social and political units known as *ato*; separate dormitories for unmarried men and women; government by the federated divisions of a village as represented by the old men; and a peculiar and characteristic type of dwelling.

In the second wave series we find the Apayo, the western division at least of the people known as Kalinga, the Tinguian, and Ilocano.² In none of these groups do we find the institutions just mentioned. Trial unions are unknown, and marriage restrictions are based solely on blood relationship; government is through the headman aided by the elders of his village, or is a pure democracy. Considerable variation exists between the dwellings of these four peoples, yet they conform to a general type which is radically different from that of the Igorot.

The Apayao and Kalinga divisions of this second wave series, by reason of their environment, their more isolated localities and consequent lack of frequent communication with the coast, have a simpler culture than that of the Tinguian; yet they have, during many generations, developed certain traits and institutions now apparently peculiar to them. The Tinguian and Ilocano, on the other hand, have had the advantages of outside communication of extensive trade, and the admixture of a certain amount of foreign blood.

These last two groups evidently left their ancient home as a unit, at a time prior to the Hindu domination of Java and Sumatra, but probably not until the influence of that civilization had begun to make itself felt. Traces of Indian culture are still to be found in the language, folklore, religion, and economic life of this people, while the native script which the Spanish found in use among the Ilocano seems, without doubt, to owe its origin to that source.

After reaching Luzon, this people slowly broke up into groups which spread out over the provinces of Ilocos Sur and Norte, Union and Abra. The partial isolation of some of these divisions, local feuds, the universal custom of head-hunting, and the need of human victims to accompany the spirits of the dead, all doubtless aided in separating

¹ The BONTOC Igorot is taken as one of the least influenced and most typical of the Igorot groups.

² On this point see COLE, *The Distribution of the Non-Christian Tribes of Northwestern Luzon* (*American Anthropologist*, N. S., Vol. XI, 1909, pp. 329-347).

the tribe into a number of dialect groups,—groups which nevertheless retained the old culture to a surprising degree.

Long before the arrival of the Spanish, Chinese and Japanese traders were visiting the Ilocos coasts. We are also informed that merchants from Macao and India went there from time to time, while trade relations with Pangasinan and the Tagalog provinces were well developed.

The leavening influence of trade and contact with other peoples resulted in such advancement that this people was early mentioned as one of the six "civilized" tribes of the Philippines.

Upon the arrival of Salcedo, the greater portion of the coast people accepted the rule of Spain and the Christian religion, while the more conservative element retired to the interior, and there became merged with the mountain people. To the Spaniards, the Christianized natives became known as Ilocano, while the people of the mountain valleys were called Tinguian, or mountain dwellers.

If the foregoing sketch is correct, as I believe the data which follow prove it to be, we find in the Tinguian of to-day a people living much the same sort of life as did the members of the more advanced groups at the time of the Spanish invasion, and we can study in them early Philippine society stripped of its European veneer.

This second and concluding section of Volume XIV gives the greater part of the results of an investigation carried on by me with the assistance of Mrs. Cole among the Tinguian, from January, 1907, to June, 1908; the funds for which were furnished Field Museum of Natural History by the late Robert F. Cummings. The further generosity of Mrs. Cummings, in contributing a fund toward the printing of this publication is also gratefully acknowledged.

A collection of texts and a study of the language are contemplated for a separate volume, as is also the detailed treatment of the anthropometric data.

For the transcription of the phonograph records and the chapter on Music, I am indebted to Mr. Albert Gale. His painstaking analysis establishes beyond question the value of the phonograph as an aid in ethnographic research.

The photographs, unless otherwise noted, were taken by the author in the field.

I. GEOGRAPHICAL RELATIONS AND HISTORY

The Tinguian are a pagan Philippine people who inhabit chiefly the mountain province of Abra in northwestern Luzon. From this center their settlements radiate in all directions. To the north and west, they extend into Ilocos Sur and Norte as far as Kabittaoran. Manabo, on the south, is their last settlement; but Barit, Amtuagan, Gayaman, and Luluno are Tinguian mixed with Igorot from Agawa and Sagada. Villaviciosa is an Igorot settlement from Sagada, but Bulilising, still farther south, is predominantly Tinguian. Sigay in Amburayan is said to be made up of emigrants from Abra, while a few rancherias in Lepanto are likewise much influenced. The non-Christian population of Ilocos Sur, south of Vigan, is commonly called Tinguian, but only seven villages are properly so classed;¹ four others are inhabited by a mixed population, while the balance are Igorot colonies from Titipan, Sagada, and Fidilisan. Along the Cordillera Central, from the head-waters of the Saltan (Malokbot) river as far south as Balatok, is found a population of mixed Tinguian, Kalinga, and Igorot blood. Kalinga predominates north of Balbalasang and along the Gobang river, while the Igorot is dominant in Guina-an, Lubuagan, and Balatok. Tinguian intermarriage has not extended far beyond Balbalasang, but their culture and dress have affected the whole region.² From this belt there have been extensive migrations into Abra, the newcomers for the most part marrying with the Tinguian, but in the Ikmin river valley emigrants from Balatok formed the towns of Danok, Amti, and Doa-angan, which have remained quite isolated up to the present time. Agsimao and other towns of the Tineg group, in the extreme northern end of Abra, are made up chiefly of Apayao mixed with Kalinga, while all the villages on the headwaters of the Binongan have received emigrants from the Kagayan side. The population of the towns properly classed as Tinguian is approximately twenty thousand individuals.³

¹ These are Ballasio, Nagbuquel, Vandrell, Rizal, Mision, Mambog, and Masingit. Kadangla-an, Pila, Kolongbuyan (Sapang) and Montero are mixed Tinguian and Igorot.

² See COLE, *The Tinguian* (*Philippine Journal of Science*, Vol. III, No. 4, Sect. A, 1908, pp. 197, *et seq.*).

³ BEYER (*Population of the Philippine Islands in 1916*, p. 74, Manila, 1917) gives the population as 27,648.

From the foregoing it is seen that, with the exception of a few villages of mixed descent, all their territory lies on the western side of the Cordillera Central,¹ the great mountain range which runs from north to south through northern Luzon.

As one emerges from the jungle, which covers the eastern slopes of these mountains, and looks down over the province of Abra, he sees an exceedingly broken land (Plates I and II), the subordinate ranges succeeding one another like the waves of the sea. The first impression is one of barrenness. The forest vanishes, and in its place are long grassy slopes, broken here and there by scattered pines and lower down by dense growths of the graceful, feathery bamboo. But this lack of trees is more fancied than real, for as one proceeds down any of the valleys he meets with side canyons, where the tropical jungle still holds sway, while many a mountain side is covered with a dense undergrowth of shrubs, plants, and vines. It seems probable that the forest once covered the western slopes of the mountains, but accident and intention on the part of man has cleared broad sections. As soon as the shade is removed, the land is invaded by a coarse grass (the *cogon*), and this is burned over each year in order to provide feed for the stock and to make good hunting grounds. The young trees are killed off and reforestation prevented.

Numerous streams plunge from the high mountains toward the coast. In places they rush through deep gorges between high mountains, again they pass peacefully through mountain valleys. Everywhere they are fed by minor streams and waterfalls until at last, as they emerge into the broader valleys of the Abra and its tributaries, they are rivers of respectable size.

The great central valley of Abra is far from being a level plain. In places, as about Manabo, Bukay, and Bangued, there are stretches of level land; but, for the most part, the country is rough and broken. This valley is cut off from the sea by the Coast Range of mountains which forms the provincial line between Abra and Ilocos Sur, while another heavy spur forms the northern limits of Abra from Ilocos Sur to the Cordillera Central. Two small and rather difficult passes afford entrance from the coastal plain into the valley, but the chief avenue of communication is the cut through which the Abra river reaches the sea. So narrow is this entrance that, at high water, the river completely covers the floor and often raises its waters ten or fifteen feet up the canyon side. In recent years a road has been cut in the rocks above the flood waters, but even to-day most of the traffic between Abra and

¹North of Abra it is known as the Cordillera Norte.

the coast is carried on by means of rafts which are poled up the river.¹

The rainfall averages about one hundred inches, and most of this precipitation takes place between May and the end of September. This, coupled with the lack of forest, causes the rivers to become rushing torrents during the rainy season, while during the balance of the year most of them are mere rivulets. Under these conditions there has been no development of navigation by the mountaineers. On occasion they may construct a bamboo raft, but they possess no boats of any description.

The great fluctuation of the streams makes fishing an uncertain occupation; yet at least a dozen varieties of fish are known, and enough are taken to add materially to the food supply.

Deer and pig are fairly abundant, and a considerable number is killed each year; wild carabao roam the mountain sides and uninhabited valleys, but they are dangerous animals, and can seldom be taken with the primitive weapons of the natives. Wild chickens are plentiful, and many are snared, together with smaller birds. In fact, there is sufficient game and fish to support a considerable population, if the people would turn seriously to their capture, so that the oft repeated statement that the mountaineers of Abra were forced to agriculture is not entirely accurate. It seems much more probable that, at the time of their entrance into the interior valleys, the Tinguian were already acquainted with terraced hillside fields, and that they developed them as needed.

The soil is fairly fertile, the rainfall abundant during the growing season, and the climate warm enough to insure good crops. The thermometer ranges between 80° and 85° during the day, but there is generally a land or sea breeze, so that actual discomfort from the heat is unusual. The nights are somewhat cooler, but a drop of a few degrees is felt so keenly that a person may be uncomfortable at 70°.

Fogs and cold rains are not uncommon during the wet season, while one or more typhoons can be expected each year. Earthquakes are likewise of occasional occurrence, but the construction of the houses is such that storms and earthquakes do much less damage than along the coast.

There is no doubt that the natural ruggedness of the country and the long rainy season have had a strong influence on the people, but this has been chiefly in isolating them in small groups. The high

¹This river traffic is entirely in the hands of the Christianized Ilocano. Rafts seldom proceed up the river beyond Bangued, the capital, and at low water even this distance is negotiated with difficulty.

mountains separating the narrow valleys, the lack of water transportation, the difficulty of maintaining trails, have all tended to keep the people in small communities, while the practice of head-hunting has likewise raised a barrier to free communication. Thus, the settlements within a limited area have become self-sustaining groups; a condition which has existed long enough to allow for the development of five dialects.

The traditions of the Tinguian furnish us with no stories of an earlier home than Luzon, but there are many accounts of migrations from the coast back into the mountains, after the arrival of the Spaniards and the Christianization of the Ilocano. The fact that there is an historical background for these tales is amply proven by fragments of pottery and the like, which the writer has recovered from the reported sites of ancient settlements.

The part played by this people in Philippine history is small indeed, and most of the references to them have been of an incidental nature.

Apparently, they first came in contact with the Spanish in 1572 when Salcedo was entrusted with the task of subduing that part of Luzon now known as the Ilocano provinces. The people he encountered are described as being more barbarous than the Tagalog, not so light complexioned, nor so well clad, but husbandmen who possessed large fields, and whose land abounded in rice and cotton.

Their villages were of considerable size, and each was ruled over by a local headman who owed allegiance to no central authority. There was a uniform, well recognized code of law or custom, and a considerable part of the population could read and write in a native script similar to that of the Tagalog. They also possessed gold, which was reported to have come from rich mines in the interior, and on primitive forges were turning out excellent steel weapons, but the use of fire-arms was unknown. According to REYES, their weapons consisted of lances, bows and arrows, bolos, great shields which protected them from head to foot, blow guns and poisoned arrows. The newcomers also found a flourishing trade being carried on with Manila and the settlements in Pangasinan, as well as with the Chinese. This trade was of such importance that, as early as 1580 pirate fleets from Japan frequently scoured the coast in search of Chinese vessels and goods, while from time to time Japanese traders visited the Ilocos ports.

Apparently trade relations were not interrupted for a considerable time after the arrival of the Spaniards, for in 1629 Medina states that

ships from China, Macao, and India "are accustomed to anchor in these ports—and all to the advantage of this district."¹

That pre-Spanish trade was not restricted to the Ilocos provinces, but was active along the whole northern coast of Luzon has been amply proved by many writers. In fact, the inhabitants of Pangasinan not only had trade relations with Borneo, Japan, and China,² but it now seems probable that they can be identified as the Ping-ka-shi-lan who, as early as 1406, sent an embassy to China with gifts of horses, silver, and other objects for the emperor Yung-lo.³

Trade relations of an even earlier date are evident throughout all this area, in the presence far in the interior of Chinese pottery of the fourteenth century and possibly of the tenth.⁴

With friendly relations so long established, it is to be expected that many evidences of Chinese material culture would be found in all the northern provinces; and it is not unlikely that a considerable amount of Chinese blood may have been introduced into the population in ancient times, as it has been during the historic period. It does not seem probable, however, that either the influence of Chinese blood or culture need have been stronger in the Ilocos provinces than in the other regions which they visited.

When Salcedo attempted a landing at Vigan, he was at first opposed; but the superior weapons of the Spaniards quickly overcame all resistance, and the invaders took possession of the city, which they rechristened Fernandino. From this center they carried on an energetic campaign of reduction and Christianization. As fast as the natives accepted the rule of Spain, they were baptized and taken into the church, and so rapid was the process that by 1587 the Ilocano were reported to be Christianized.⁵ In fact, force played such a part that

¹ Historical references to this trade, as well as to the Spanish invasion of Ilocos, will be found in REYES, *Historia de Ilocos*, Manila, 1890; FRAY GASPAR DE S. AUGUSTIN, *Conquista de las Islas Filipinas* (Manila, 1698), p. 267; MEDINA, *Historia*, translated in BLAIR and ROBERTSON, *The Philippine Islands*, Vol. XXIII, pp. 279, *et seq.* See also translation of LOARCA and others in same publication, Vol. III, p. 73, note; Vol. V, p. 109; Vol. XV, p. 51; Vol. XVII, p. 285.

² LORACA, 1582, translated in BLAIR and ROBERTSON, *op. cit.*, Vol. V, p. 105.

³ LAUFER, *Relations of the Chinese to the Philippine Islands* (*Smithsonian Miscellaneous Collections*, Vol. I, pp. 256, *et seq.*)

⁴ COLE and LAUFER, *Chinese Pottery in the Philippines* (*Field Museum of Natural History*, Vol. XII, No. 1).

⁵ BLAIR and ROBERTSON, *op. cit.*, Vol. XVII, p. 285; also III, p. 73, note; V, p. 109; XV, p. 51.

Fray Martin de Herrada, who wrote from Ilocos in June, 1574, protested that the reduction was accomplished through fear, for if the people remained in their villages and received the rule of Spain and the Church, they were accepted as friends and forthwith compelled to pay tribute; but if they resisted and fled to other settlements, the troops followed and pillaged and laid waste their new dwellings.¹

Paralleling the coast, a few miles inland, is a range of mountains on the far side of which lie the broad valleys of the Abra river and its tributaries. The more conservative elements of the population retreated to the mountain valleys, and from these secure retreats bade defiance to the newcomers and their religion. To these mountaineers was applied the name Tinguianes—a term at first used to designate the mountain dwellers throughout the Islands, but later usually restricted to his tribe.² The Tinguian themselves do not use or know the appellation, but call themselves Itneg, a name which should be used for them but for the fact that they are already established in literature under the former term.

Although they were in constant feuds among themselves, the mountain people do not appear to have given the newcomers much trouble until toward the end of the sixteenth century, when hostile raids against the coast settlements became rather frequent. To protect the Christianized natives, as well as to aid in the conversion of these heathens, the Spanish, in 1598, entered the valley of the Abra and established a garrison at the village of Bangued.³

As before, the natives abandoned their homes and retreated several miles farther up the river, where they established the settlement of Lagangilang.

From Bangued as a center, the Augustinian friars worked tirelessly to convert the pagans, but with so little success that SAN ANTONIO,⁴ writing in 1738, says of the Tinguian, that little fruit was

¹ BLAIR and ROBERTSON, *op. cit.*, Vol. XXXIV, pp. 287, *et seq.*

² COLIN (Labor Evangelica, Chap. IV Madrid 1663), calls the Manguian of Mindoro and the Zambal, Tingues. MORGAN, CHIRINO, and RIBERA also use the same name for the natives of Basilan, Bohol, and Mindanao (see BLAIR and ROBERTSON, *op. cit.*, Vols. IV, p. 300; X, p. 71; XIII, pp. 137, 205). Later writers have doubtless drawn on these accounts to produce the weird descriptions sometimes given of the Tinguian now under discussion. It is said (*op. cit.*, Vol. XL, p. 97, note) that the radical *ngian*, in Pampanga, indicates "ancient," a meaning formerly held in other Philippine languages, and hence Tinguian would probably mean "old or ancient, or aboriginal mountain dwellers."

³ REYES, *Historia de Ilocos*, p. 151 (Manila, 1890), also *Filipinas articulos varios*, p. 345 (Manila, 1887); BLAIR and ROBERTSON, *op. cit.*, Vol. XIV, pp. 158-159; Vol. XXVIII, p. 167).

⁴ BLAIR and ROBERTSON, *op. cit.*, Vol. XXVIII, p. 158.

obtained, despite extensive missions, and that although he had made extraordinary efforts, he had even failed to learn their number.

In the mountains of Ilocos Sur, the missionaries met with somewhat better success, and in 1704 OLARTE states that in the two preceding years one hundred and fifty-six "infidel Tinguianes" had been converted and baptized. Again, in 1760, four hundred and fifty-four converts are reported to have been formed into the villages of Santiago, Magsingal, and Batak.¹ About this time the work in Abra also took on a more favorable aspect; by 1753 three Tinguian villages, with a combined population of more than one thousand, had been established near Bangued, and in the next century five more settlements were added to this list.²

In general the relations between the pagan and Christianized natives were not cordial, and oftentimes they were openly hostile; but despite mutual distrust the coast people have on several occasions enlisted the aid of the mountaineers against outside enemies. In 1660 a serious revolt occurred in Pangasinan and Zambales, and the rebels, after gaining control of these provinces, started on a looting expedition in the northern districts. In the face of strong resistance they proceeded as far north as Badok, in Ilocos Sur, burning and pillaging many villages including the capital city of Vigan (Fernandino). The Tinguian came to the aid of the hard-pressed Ilocano, and their combined forces fell upon the enemy just outside the village of Narbaçan. The tribesmen had previously made the road almost impassable by planting it thickly with sharpened sticks; and, while the invaders were endeavoring to remove these obstacles, they set upon them with great fury and, it is said, succeeded in killing more than four hundred of the Zambal, a part of whom they beheaded.³

As Spanish rule was extended into the Tinguian territory, Ilocano settlers pressed in and acquired holdings of land. This led to many bitter disputes which were consistently settled in favor of the converts; but at the same time many inducements were offered the pagans to get them into the Christianized village. All converts were to be exempted from paying tribute, while their villages received many favors withheld from the pagan settlements. This failing to bring

¹ ANTONIO MOZO, *Noticia* histórico-natural (Madrid, 1763), in BLAIR and ROBERTSON, Vol. XLVIII, p. 69.

² These were: Tayum 1803; Pidigan 1823; La Paz and San Gregorio 1832; Bukay (Labon) 1847. For further details of this mission see VILLACORTA, *Breve resumen de los progresos de la Religion Catolica en la admirable conversion de los indios Igorotes y Tinguianes* (Madrid, 1831).

³ BLAIR and ROBERTSON, *op. cit.*, Vol. XXXVIII, p. 199.

the desired results, all the nearby villages of the Tinguian were incorporated with the civilized pueblos, and thereafter they had to furnish the major part of all taxes and most of the forced labor.

Following the appointment of Gov. Esteban de Penñarubia in 1868, the tribesmen suffered still greater hardships. Under his orders all those who refused baptism were to be expelled from the organized communities, an edict which meant virtual banishment from their old homes and confiscation of their property. Further, no Tinguian in native dress was to be allowed to enter the towns. "Conversions" increased with amazing rapidity, but when it was learned that many of the new converts still practiced their old customs, the governor had the apostates seized and imprisoned. The hostile attitude of Penñarubia encouraged adventurers from the coast in the seizure of lands and the exploitation of the pagans, and thus a deep resentment was added to the dislike the Tinguian already held for "the Christians." Yet, despite the many causes for hostility, steady trade relations have been maintained between the two groups, and the influence of the Ilocano has been increasingly strong. A little more than a half century ago head-hunting was still common even in the valley of Abra, where it is now practically unknown. As a matter of dire necessity the mountain people made raids of reprisal against the hostile Igorot villages on the eastern side of the great mountain range, and it is still the proud boast of many a man in the vicinity of Manabo that he took part in the raid which netted that village a score of heads from the towns of Balatok and Lubuagan. But, as will be seen later, head-hunting was by no means limited to forays against other tribes; local feuds, funeral observances, and the desire for renown, all encouraged the warriors to seek heads even from nearby settlements. Those incentives have not been entirely removed, and an occasional head is still taken in the mountain districts, but the influence of the Ilocano, backed by Spanish and American authority, is rapidly making this sport a thing of the past.

The rule of Governor Penñarubia had so embittered the Tinguian against the "white man" that a considerable number joined the insurrecto troops to fight against the Spaniards and Americans. These warriors, armed with spears, shields, and head-axes, made their way to Malolos, where they joined the Filipino troops the day of the first American bombardment. The booming of cannon and the bursting of shells were too much for the warriors, and, as they express it, "the first gun was the beginning of their going home."

Friendly relations with the insurgents were early destroyed by

bands of armed robbers who, posing as Filipino troops, looted a number of Tinguian villages. In several localities the tribesmen retaliated by levying tribute on the Christianized villages, and in some instances took a toll of heads to square accounts. At this juncture the Americans appeared in Abra, and the considerate treatment of the pagans by the soldiers soon won for them a friendly reception. Later, as the result of the efforts of Commissioner Worcester, the Tinguian villages were made independent of Ilocano control, and the people were given the full right to conduct their own affairs, so long as they did not disturb the peace and welfare of the province.

Under American rule the Tinguian have proved themselves to be quiet, peaceable citizens; a few minor disturbances have occurred, but none of sufficient importance to necessitate the presence of troops in their district. They have received less attention from the Government than most of the pagan tribes, but, even so, a measure of progress is discernible. They still stoutly resist the advances of the missionaries, but the few schools which have been opened for their children have always been crowded to overflowing; trade relations are much freer and more friendly than a decade ago; and with the removal of unequal taxes and labor requirements, the feelings of hostility towards "the Christians" are rapidly vanishing. It now seems probable that within one or two generations the Tinguian will again merge with the Ilocano.

II. PHYSICAL TYPE AND RELATIONSHIPS

From the time of the Spanish invasion up to the present, nearly every author who has mentioned the people of northern Luzon has described the Tinguian as being different from other Philippine tribes. The majority of these writers has pictured them as being of larger stature than their neighbors; as lighter in color, possessing aquiline features and mongoloid eyes; as being tranquil and pacific in character, and having a great aptitude for agriculture. From these characteristics they have concluded that they are probably descended from early Chinese traders, emigrants, or castaways, or are derived from the remnants of the pirate band of the Chinese corsair Limahon (Lin-fung), which fled into the mountains of Pangasinan after his defeat by Salcedo in 1574.

These conjectures are strengthened by the reported discovery, in early times, of graves in northwestern Luzon, which contained bodies of men of large stature accompanied by Chinese and Japanese jewels. The undisputed fact that hundreds of ancient Chinese jars and dishes are still among the cherished possessions of the Tinguian is also cited as a further proof of a close relationship between these peoples. Finally it is said that the head-bands, jackets, and wide trousers of the men resemble closely those of the fishermen of Fukien, one of the nearest of the Chinese provinces.¹

Two writers,² basing their observations on color, physical resem-

¹ Discussions concerning the Chinese origin of the Tinguian will be found in MALLAT, *Les Philippines*, Vol. I, pp. 212-213; Vol. II, pp. 104-7, 345 (Paris, 1846); PLAUCHET, *L'Archipel des Philippines* (*Revue des deux Mondes*, 1887, p. 442); BUZETO Y BRAVO, *Diccionario geografico estadistico historico*; SEMPER, *Die Philippinen und ihre Bewohner* (Würzburg, 1869); BLUMENTRITT, *Versuch einer Ethnographie der Philippinen* (*Peterman's Mittheilungen*, 1882, No. 67); REYES, *Die Tinguianen* (*Mittheilungen K. K. Geogr. Gesellschaft in Wien*, 1887, p. 5, *et seq.*); REYES, *Filipinas articulos varios* (Manila, 1887); SANCHEZ Y RUIZ, *Razas de Filipinas, usos y costumbres*, *Memoria Exposicion General*, pp. 51, 60, 138 (Manila, 1887); MONTBLANC, *Les Isles Philippines*, p. 22 (Paris, 1887); MONTERO Y VIDAL, *El Archipelago Filipino*, p. 289 (Manila, 1886); BOWRING, *A Visit to the Philippines*, p. 171 (London, 1859); SAWYER, *The Inhabitants of the Philippines*, p. 276 (London, 1900); ZUNIGA, *Historia*, pp. 19-38 (Sampaloc, 1803); COLIN, *Labor evangelica*, Vol. I, chaps. 4, 12-14 (Madrid, 1663); BLAIR and ROBERTSON (*The Philippine Islands*, Vol. XL, pp. 316, *et seq.*) give a translation of SAN ANTONIO *Chronicas*, written in Manila between 1738-44, also of COLIN, *Labor evangelica*, of 1663; BRINTON, *The Peoples of the Philippines* (*Am. Anthropologist*, Vol. XI, 1898, p. 302).

² PAUL DE LA GIRONIÈRE, *Vingt années aux Philippines* (Paris, 1853); STUNTZ, *The Philippines and the Far East*, p. 36 (New York, 1904).

blances, and the fact that the Tinguian blacken their teeth and tattoo their bodies, are convinced that they are the descendants of Japanese castaways; while MOYA¹ states that the features, dress, and customs of this people indicate their migration from the region of the Red Sea in pre-Mohammedan times.

Finally, QUATREFAGES and HAMY are quoted as regarding the Tinguian as modern examples of "the Indonesian, an allophylic branch of the pure white race, non-Aryan, therefore, who went forth from India about 500 B. C."²

DR. BARROWS³ classes all the pagan tribes of northern Luzon—the pygmies excepted—with the Igorot, a position assailed by WORCESTER,⁴ particularly in regard to the Tinguian; but the latter writer is convinced that the Apayao and Tinguian are divisions of the same people, who have been separated only a comparatively short time.

In the introduction to the present volume (p. 236) I have expressed the opinion that the Tinguian and Ilocano are identical, and that they form one of the waves of a series which brought the Apayao and western Kalinga to northern Luzon, a wave which reached the Islands at a later period than that represented by the Igorot, and which originated in a somewhat different region of southeastern Asia.⁵

In order to come to a definite decision concerning these various theories, we shall inquire into the cultural, linguistic, and physical types of the people concerned.

The most striking cultural differences between the Igorot and the Tinguian, indicated in the introduction, will be brought out in more detail in the following pages, as will also the evidence of Chinese influence in this region. Here it needs only to be restated, that there

¹ Quoted by PATERNO, *La antigua civilizacion Tagalog*, pp. 122-123 (Madrid, 1887).

² BRINTON, *The Peoples of the Philippines* (*Am. Anthropologist*, Vol. XI, 1892, p. 297). See also DE QUATREFAGES, *Histoire générale des races humaines*, pp. 515-517, 527-528.

³ *Census of the Philippine Islands of 1903*, pp. 453-477.

⁴ *The Non-Christian Tribes of Northern Luzon* (*Philippine Journal of Science*, Vol. I, pp. 798, 851, Manila, 1906).

⁵ BLUMENTRITT (*Ethnographie der Philippinen*, Introduction; also *American Anthropologist*, Vol. XI, 1898, p. 296) has advanced the theory of three Malay invasions into the Philippines. To the first, which is put at about 200 B. C., belong the Igorot, Apayao, and Tinguian, but the last are considered as of a later period. The second invasion occurred about A.D. 100-500, and includes the Tagalog, Visaya, Ilocano, and other alphabet-using peoples. The third is represented by the Mohammedan groups which began to enter the Islands in the fourteenth century.

are radical differences in social organization, government, house-building, and the like, between the Igorot-Ifugao groups, and the Ilocano-Tinguian-Apayao-Kalinga divisions.

All the tribes of northwestern Luzon belong to the same linguistic stock which, in turn, is closely related to the other Philippine languages. There are local differences sufficiently great to make it impossible for people to communicate when first brought together, but the vocabularies are sufficiently alike, and the morphology of the dialects is so similar that it is the task of only a short time for a person conversant with one idiom to acquire a speaking and understanding knowledge of any other in this region. It is important to note that these dialects belong to the Philippine group, and there seems to be very little evidence of Chinese influence¹ either in structure or vocabulary.²

The various descriptions of the physical types have been of such a conflicting nature that it seems best at this point to present rather detailed descriptions of the Tinguian, Ilocano, and Apayao, and to compare these with the principal measurements of the other tribes and peoples under discussion.

For purposes of comparison, the Tinguian have been divided into a valley and mountain group; for, as already indicated, there has been a considerable movement of the mixed Kalinga-Igorot people of the upper Saltan (Malokbot) river, of Guinaan Lubuagan and Balatok, into the mountain districts of Abra, and these immigrants becoming merged into the population have modified the physical type to a certain extent.

In the detailed description of the Ilocano, all the subjects have been drawn from the cities of Bangued in Abra, and Vigan in Ilocos Sur, in order to eliminate, so far as possible, the results of recent intermixture with the Tinguian,—a process which is continually taking place in all the border towns. The more general tabulation includes Ilocano from all the northern provinces.

¹ BRINTON (*Am. Anthropologist*, Vol. XI, 1898, p. 302) states that the Ilocano of northwestern Luzon are markedly Chinese in appearance and speech, but he fails to give either authorities or examples to substantiate this claim. For Indian influence on Philippine dialects, see PARDO DE TAVERA, *El sanscrito e la lingua tagalog* (Paris, 1887); also WILLIAMS, *Manual and Dictionary of Ilocano* (Manila, 1907).

² A detailed study of the language is not presented in this volume. The author has a large collection of texts which will be published at a later date, together with a study of the principal Tinguian dialects. A short description of the Ilocano language, by the writer, will be found in the *New International Encyclopædia*.

Aged and immature individuals have been eliminated from all the descriptions here presented.¹

ILOCANO

OBSERVATIONS ON 19 MALES FROM VIGAN AND BANGUED

	Range	Average
Height, standing	1.510 to 1.714	1.607
Length of head .....	.164 to .191	.1787
Breadth of head .....	.146 to .158	.1522
Height of head .....	.120 to .144	.1316
Breadth of zygomatic arches .....	.129 to .148	.1373
Length of nose .....	.043 to .054	.0485
Breadth of nose .....	.034 to .046	.0382
Cephalic index	85.1	
Length-Height index	73.0	
Breadth-Height index	86.2	
Nasal index	78.7	

Eyes—Dark brown, 3-4 of Martin scale.

Hair—Often black, but usually brown-black. 50 per cent straight and about 50 per cent slightly wavy. One case closely curled.

Forehead—Usually high, broad, and moderately retreating, but sometimes vaulted.

Crown and back of head—Middle arched. Two cases flat.

Face—Moderately high; broad and oval. Three cases angular.

Eye-slit—Generally slightly oblique, moderately open, almond shape.

Mongolian fold present in 45 per cent.

Nose—Root:—Middle broad and moderately high.

Bridge:—Inclined to be concave, but often straight.

Wings:—Middle thick and slightly arched or swelled.

Lips:—Middle thick and double bowed (slightly).

Ears—Outstanding. Lobes generally small and close growing, but are sometimes free.

ILOCANO²

OBSERVATIONS MADE BY FOLKMAR (SEE ALBUM OF PHILIPPINE TYPES, MANILA, 1904)

37 Males of Ilocos Norte

	Average
Height, standing	1.593
Length of head .....	.180
Breadth of head .....	.151
Length of nose .....	.055
Breadth of nose .....	.040
Cephalic index	84.39
Nasal index	73.12

¹ A more detailed study of these tribes will be given in a forthcoming volume on Philippine Physical Types.

² Observations on 13 Ilocano skulls are tabulated by KOEZE (*Crania Ethnica Philippinica*, pp. 56-57, Haarlem, 1901-4).

59 Males of Ilocos Sur

		Average
Height, standing	meters	1.596
Length of head	"	.177
Breadth of head	"	.150
Length of nose	"	.053
Breadth of nose	"	.039
Cephalic index	85.06	
Nasal index	72.95	

31 Males of Union Province

		Average
Height, standing	meters	1.590
Length of head	"	.176
Breadth of head	"	.151
Length of nose	"	.050
Breadth of nose	"	.039
Cephalic index	85.72	
Nasal index	78.63	

193 Males from All Provinces

		Average
Height, standing	meters	1.602
Length of head	"	.178
Breadth of head	"	.151
Length of nose	"	.052
Breadth of nose	"	.040
Cephalic index	84.81	
Nasal index	75.44	

VALLEY TINGUIAN

OBSERVATIONS ON 83 MALES (SEE PLATES III, IV)

		Range	Average
Height, standing	meters	1.48 to 1.70	1.572
Length of head	"	.165 to .195	.1811
Breadth of head	"	.140 to .164	.1507
Height of head, 39 cases	"	.116 to .144	.1337
Breadth of zygomatic arches.....	"	.129 to .148	.1387
Length of nose	"	.042 to .060	.0499
Breadth of nose	"	.030 to .043	.0384
Cephalic index	83.2		
Length-Height index	72.5		
Breadth-Height index	86.5		
Nasal index	76.9		

Eyes—Dark brown, 3-4 of Martin table.

Hair—Varies from black to brownish black. Usually wavy, but straight in about one third.

Forehead—Moderately high and broad; slightly retreating, but sometimes vaulted. Supra-orbital ridges strongly developed in three cases.

Crown and back of head—Middle arched. Two cases of flattening.

Face—Moderately high and broad; cheek bones sufficiently outstanding to give face angular appearance, tapering from above, but oval faces are common.

Eye-slit—Straight or slightly oblique; moderately wide open and inclined to be almond shaped; Mongolian fold slightly developed in about 20 per cent.

Nose—Root:—middle broad and high, seldom small or flat.

Bridge:—middle broad and usually straight, but 25 per cent are slightly concave, while two cases are convex.

Wings:—In most cases are thin, but are commonly thick; both are slightly arched.

Lips—Middle thick and double bowed (slightly).

Ears—Outstanding, with small close-growing lobes.

VALLEY TINGUIAN

OBSERVATIONS ON 35 FEMALES (SEE PLATES V, VI)

	Range	Average
Height, standing	1.42 to 1.58	1.474
Length of head .....	.161 to .186	.1743
Breadth of head .....	.136 to .155	.1460
Height of head (22 cases) .....	.119 to .138	.1301
Breadth of zygomatic arches .....	.123 to .139	.1304
Length of nose .....	.039 to .056	.046
Breadth of nose .....	.030 to .042	.0354
Cephalic index	83.7	
Length-Height index	74.6	
Breadth-Height index	88.6	
Nasal index	76.9	

Eyes—Dark brown, 3-4 of Martin table.

Hair—Usually brown black, but black is common. Sometimes straight, but generally slightly wavy.

Forehead—Considerable variation. Usually moderately high, broad, and vaulted, but is sometimes low and moderately retreating.

Crown and back of head—Middle arched. Two cases of flattening.

Face—Moderately high and oval. In a few cases angular, tapering from above.

Eye-slit—Generally oblique, moderately open and almond shape. Is sometimes straight and narrowly open. Mongolian fold slightly developed in about 25 per cent.

Nose—Root:—Moderately broad and either flat or slightly elevated.

Bridge:—Middle broad and slightly concave. In five cases is straight and in two is convex.

Wings:—Equally divided between thick and thin. Slightly arched.

Lips—Middle thick and double bowed (slightly).

Ears—Outstanding, with small, close growing lobes.

MOUNTAIN TINGUIAN

OBSERVATIONS ON 62 MALES (SEE PLATES VII-VIII)

	Range	Average
Height, standing	1.45 to 1.71	1.57
Length of head .....	.171 to .203	.1856
Breadth of head .....	.140 to .161	.1493
Height of head (59 cases) .....	.115 to .154	.1316
Breadth of zygomatic arches .....	.129 to .149	.1385
Length of nose (60 cases) .....	.043 to .059	.0512
Breadth of nose (60 cases) .....	.033 to .046	.0399
Cephalic index	80.4	
Length-Height index	70.9	
Breadth-Height index	87.4	
Nasal index	77.9	

Eyes—Dark brown, 3-4 of Martin table.

Hair—Brown black, and slightly wavy.

Forehead—Middle high to high, moderately broad, moderately retreating, but sometimes vaulted. Supra-orbital ridges strongly developed in five cases.

Crown and back of head—Middle or strongly arched.

Face—Moderately high. Cheek bones moderately outstanding giving face angular appearance, tapering from above. In seven cases face is oval.

Eye-slit—Sometimes straight, but usually slightly oblique, moderately open, almond shape. Mongolian fold in five cases.

Nose—Root:—Middle broad and moderately high, but sometimes high.

Bridge:—Middle broad and straight. Seven cases concave and three convex.

Wings:—Middle thick and arched.

Lips—Middle thick, sometimes thin; double bowed.

Ears—Outstanding; lobes generally small and close growing.

MOUNTAIN TINGUIAN

OBSERVATIONS ON 16 FEMALES (SEE PLATES IX-X)

	Range	Average
Height, standing	1.38 to 1.53	1.482
Length of head .....	.163 to .188	.1782
Breadth of head .....	.137 to .155	.1452
Height of head .....	.119 to .137	.1303
Breadth of zygomatic arches .....	.125 to .138	.1327
Length of nose .....	.039 to .054	.0461
Breadth of nose .....	.034 to .042	.0368
Cephalic index	80.1	
Length-Height index	73.1	
Breadth-Height index	90.0	
Nasal index	79.8	

Eyes—Dark brown, 3-4 of Martin table.

Hair—Brown-black and slightly wavy.

Forehead—Moderately high and broad; moderately retreating.

Crown and back of head—Middle arched.

Face—Moderately high and generally oval; sometimes angular tapering from above.

Eye-slit—About equally divided between straight and oblique; moderately open. Mongolian fold slightly developed in one third of cases.

Nose—Root:—Moderately broad and nearly flat, but sometimes moderately high.

Bridge:—Middle broad and inclined to be concave. Straight noses occur.

Wings:—Usually thin and inclined to be swelled.

Lips—Middle thick and inclined to be double bowed.

Ears—Outstanding. Lobes small and close growing.

APAYAO

OBSERVATIONS ON 32 MALES

	Range	Average
Height, standing .....meters	1.48 to 1.70	1.587
Length of head .....	.175 to .199	.1877
Breadth of head .....	.137 to .158	.1492
Height of head .....	.119 to .155	.1331
Breadth of zygomatic arches .....	.130 to .149	.1418
Length of nose .....	.040 to .054	.0466
Breadth of nose .....	.035 to .044	.0390
Cephalic index	79.5	
Length-Height index	70.9	
Breadth-Height index	89.2	
Nasal index	83.6	

Eyes—Dark brown, 1 to 4 in Martin table.

Hair—Brown black and wavy.

Forehead—High and generally moderately retreating, but in about one third is vaulted. Supra-orbital ridges strongly developed in six cases.

Crown and back of head—Rather strongly arched. Six cases (all from one village) showed slight flattening of occipital region.

Face—Usually high. The cheek bones are moderately outstanding giving face angular appearance, tapering from above. In eight cases face tapers from below, and in nine is oval.

Eye-slit—Usually oblique, moderately open, almond shape. Mongolian fold in about 50 per cent.

Nose—Root:—Middle broad and flat or slightly elevated.

Bridge:—Middle broad and slightly or strongly concave. Seven instances of straight noses occur.

Wings:—Middle thick, arched or swelled.

Lips—Middle thick and slightly double bowed.

Ears—Outstanding. Lobes small and close growing.

BONTOC IGOROT¹

OBSERVATIONS BY JENKS (SEE THE BONTOC IGOROT, MANILA, 1905)

	32 males	Average	Range
Height, standing	meters	1.6028	
Length of head	"	.1921	
Breadth of head	"	.1520	
Length of nose	"	.0525	
Breadth of nose	"	.0462	
	Cephalic index	79.13	67.48 to 91.48
	Nasal index	79.19	58.18 to 104.54

In this group 9 are brachycephalic

20 are mesaticephalic

3 are dolichocephalic

Color—Ranges from light brown, with strong saffron undertone, to very dark brown or bronze.

Eyes—Black to hazel brown. "Malayan" fold in large majority.

Hair—Coarse, straight and black. A few individuals possess curly or wavy hair.

Nose—Jenks gives no statement, but his photos show the root of the nose to be rather high; the bridge appears to be broad and straight, although in some individuals it tends toward concave.

	29 females	Average	Range
Height, standing	meters	1.4580	
Length of head	"	.1859	
Breadth of head	"	.1470	
Length of nose	"	.0458	
Breadth of nose	"	.0360	
	Cephalic index	79.09	64.89 to 87.64
	Nasal index	78.74	58.53 to 97.56

In this group 12 are brachycephalic

12 are mesaticephalic

5 are dolichocephalic

Very different results were obtained by KROEBER² from the group of Igorot exhibited in San Francisco in 1906. His figures may possibly be accounted for by the fact that about one third of the party came from Alap near the southern end of the Bontoc area, also, as he has suggested, by the preponderance of very young men. The figures for this group are as follows:

¹ A short series of Igorot skull measurements is given by KOEZE (*Crania Ethnica Philippinica*, pp. 42-43, Haarlem, 1901-4).

² *Am. Anthropologist*, 1906, pp. 194-195.

OBSERVATIONS ON 18 MALES

Average height	1.550	Range	1.46 to 1.630
" length of head	.186	"	.176 to .194
" breadth of head	.146	"	.138 to .153
" bizygomatic width	.135	"	.129 to .142
" length of nose	.041	"	.031 to .046
" breadth of nose	.040	"	.036 to .046
" cephalic index	78.43		
" nasal index	99.8		

OBSERVATIONS ON 7 FEMALES

Average height	1.486	Range	1.440 to 1.530
" length of head	.182	"	.171 to .191
" breadth of head	.143	"	.136 to .150
" bizygomatic width	.131	"	.127 to .136
" length of nose	.037	"	.033 to .042
" width of nose	.037	"	.036 to .038
" cephalic index	78.59		
" nasal index	99.7		

From these descriptive sheets it is obvious that each tribe is made up of very heterogeneous elements, and each overlaps the other to a considerable extent; however, the number of individuals measured is sufficiently great for us to draw certain general conclusions from the averages of each group.

It is at once evident that the differences between the Ilocano and the Valley Tinguian are very slight, in fact are less than those between the valley and mountain people of the latter tribe. The Ilocano appear to be slightly taller, the length of head a little less, and the breadth a bit more; yet there is an average difference of only two points in the cephalic indices of the two groups. The only other points of divergence are: the greater percentage among the Ilocano of eyes showing the Mongolian fold, and the occurrence of straight hair in about half the individuals measured. However, this latter feature may be more apparent than real; for the Ilocano cut the hair short, and a slight degree of waviness might readily pass unobserved.

As we pass from the Valley to the Mountain Tinguian, and from them to the Apayao, we find the average stature almost constant, but the head becomes longer; there is a greater tendency for the cheek-bones to protrude and the face to be angular, and there is a more frequent development of the supra-orbital ridges. The root of the nose is often flat and the bridge concave; while wavy hair becomes the rule in the mountains. There is a slight decrease, in the Tinguian groups, of eyes showing the Mongolian fold, but in the Apayao the percentage again equals that of the Ilocano.

The Apayao present no radical differences to the Mountain Tinguian; yet, as already noted, the length and height of the head are

slightly greater; the zygomatic arches more strongly developed; the face more angular; and the nose is broader as compared with its length. Evidences of former extensive intermixture are here apparent, while at the present time there is rather free marriage with the neighboring Kalinga and Negrito.

Comparing these four groups with the Igorot, we find that the latter averages slightly taller than all but the Ilocano. The breadth of the head is about the same as the Ilocano; but the length is much greater, and there is, in consequence, a considerable difference in the cephalic index. Reference to our tables will show the Ilocano and both Tinguian divisions to be brachycephalic, while the Igorot is mesaticephalic. The average index of the Apayao also falls in the latter classification; but the variation from Igorot is greater than is indicated, for the Apayao skull is actually considerably shorter and narrower. In the length and breadth of the nose, the Igorot exceeds any of the groups studied, while the Malayan (Mongolian?) fold of the eye is reported in the great majority of cases. The bodily appearance of the Tinguian and Bontoc Igorot differs little, although the latter are generally of a slightly heavier build. Both are lithe and well proportioned, their full rounded muscles giving them the appearance of trained athletes; neither is as stocky or heavy set as are the Igorot of Amburayan, Lepanto, and Benguet.

There is great variation in color among the members of all these tribes, the tones varying from a light olive brown to a dark reddish brown; but in general the Ilocano and Valley Tinguian are of a lighter hue than the mountain people.

Observations on the Southern Chinese and the South Perak Malay are given below, not with the intention of connecting them with any one of the tribes of Luzon, but in order to test, by comparison, the theory of the Chinese origin of the Tinguian, and also to secure, if possible, some clue as to the relationships of both peoples.

THE SOUTHERN CHINESE

DR. GIRARD,¹ as a result of his studies on the Chinese of Kwang-si, a province of southern China, expresses the belief that the population is greatly mixed, but all considered they appear more like Indo-Chinese than like the Chinese proper (that is, Northern Chinese). DENIKER²

¹ Notes sur les Chinois du Quang-si (*L'Anthropologie*, Vol. IX, 1898, pp. 144-170).

² The Races of Man, pp. 384, 577, *et seq.* (London, 1900).

comes to a similar conclusion from a study of the results obtained by many observers.

GIRARD gives the following measurements for 25 males of Kwang-si:

	Range	Average
Height, standing .....meters	1.528 to 1.748	1.616
Length of head	"	.1815
Breadth of head	"	.1435
Height of head	"	.1270
Length of nose	"	.04648
Breadth of nose	"	.03876
Cephalic index	73. to 85.	79.52
Length-Height index		69.9
Breadth-Height index		88.5
Nasal index	67. to 95.	82.98

DENIKER (p. 578) gives the average height of 15,582 males, mostly Hakka of Kwang-tung, as 1.622. The cephalic index of 61 living subjects and 84 crania, principally from Canton, he finds to be—Living 81.2; crania 78.2.

MARTIN¹ presents the following data: Average height of males—1.614; average height of females—1.498. Cephalic index (49 males)—81.8. Length-Height index (49 males)—66.5. Nasal index (49 males)—77.7.²

SOUTH PERAK MALAY³

OBSERVATIONS BY ANNANDALE AND ROBINSON (FASCICULI MALAYENSES, PT. I, pp. 105 *et seq.*, LONDON, 1903).

	37 males	Range	Average
Height, standing .....meters	1.488	to 1.763	1.594
Length of head .....	.173	to .198	.182
Breadth of head .....	.141	to .162	.149
Height of head (tragus to vertex) ....	.119	to .146	.135
Breadth of zygomatic arches.....	.120	to .150	.139
Length of nose .....	.0413	to .0525	.0477
Breadth of nose .....	.0337	to .0437	.0358
Cephalic index	82.3		
Length-Height index	73.9		
Nasal index	81.2		

¹ MARTIN, *Inlandstämme der Malayischen Halbinsel*, pp. 237, 351, 358, 386 (Jena, 1905).

² For measurements on the Northern Chinese and the Formosa Chinese see KOGANEI, *Messungen an chinesischen Soldaten (Mitt. med. Fak. k. japan. Univ. Tokio, 1903, Vol. VI, No. 2)*, und *Messungen an männlichen Chinesenschädeln (Internat. Centralblatt für Anthropologie, 1902, pp. 129, et seq.)*.

³ For other observations on Malaysia, in general, see ANNANDALE and ROBINSON (*Jour. Anth. Inst.*, Vol. XXXII, 1902); KEANE, *Ethnology* (Cambridge, 1907); DUCKWORTH (*Jour. Anth. Inst.*, Vol. XXXII); HOSE and McDUGALL (*The Pagan Tribes of Borneo, Vol. II, pp. 311, et seq.*) give results by HADDON; HAMY (*L'Anthropologie, Vol. VII, Paris, 1896*); HAGEN, *Anthropologische Studien aus Insulinde* (Amsterdam, 1890); SULLIVAN, *Racial Types in the Philippine Islands (Anth. Papers, American Museum of Nat. Hist., Vol. XIII, pt. 1, New York, 1918)*.

Color—Varies from dark olive to red; less commonly olive or yellowish white.

Eyes—Black, sometimes reddish brown.

Hair—Appears to be straight in most cases, but being cut short a slight waviness might not be noticed. Black.

A comparison of these figures with those of our Luzon groups brings out several interesting points. It shows that the Tinguian are not related to the Chinese, "because of their tall stature;" for they are, as a matter of fact, shorter than either the Chinese or Igorot. It is also evident that they resemble the southern Chinese no more than do the people of Bontoc. Further it is seen that both the Tinguian-Ilocano and the Chinese show greater likeness to the Perak Malay than they do to each other. As a matter of fact, we find no radical differences between any of the peoples discussed; despite evident minor variations, the tribes of northwestern Luzon approach a common type, and this type appears not to be far removed from the dominant element in southern China, Indo-China, and Malaysia generally, a fact which probably can be attributed to a common ancestry in times far past.¹

With this data before us, we might readily dismiss most of the theories of early writers as interesting speculations based on superficial observation; but the statement that the Tinguian are derived from the pirate band of Limahon has received such wide currency that it deserves further notice. It should be borne in mind that the scene of the Chinese disaster was in Pangasinan, a march of three days to the south of the Tinguian territory. It is unlikely that a force sufficiently large to impress its type on the local population could have made its way into Abra, without having been reported to Salcedo, who then had his headquarters at Vigan.

As early as 1598 the Tinguian were so powerful and aggressive that active steps had to be taken to protect the coast people from their raids. Had they been recognized as being essentially Chinese—a foreign, hostile population—some mention of that fact must certainly have crept into the Spanish records of that period. Such data are entirely wanting, while the exceedingly rich traditions of the Tinguian² likewise fail to give any evidence of such an invasion.

¹ SULLIVAN (*Anthropological Papers, American Museum Nat. History, Vol. XXIII, pt. 1, p. 42*) gives a graphic correlation of Stature, Cephalic and Nasal Indices, which shows a striking similarity between the Tagalog and Pangasinan of the Philippines, and the Southern Chinese. Had he made use of Jenks's measurements of the Bontoc Igorot, that group would also have approached quite closely to those already mentioned. The same method applied to the Ilocano and Tinguian shows them to conform to this type.

² See Traditions of the Tinguian (this volume, No. 1).

The presence of large quantities of ancient Chinese pottery in Abra must be ascribed to trade, for it is inconceivable that a fugitive band of warriors would have carried with them the hundreds of jars—many of large size—which are now found in the interior.

The reputed similarity of the garments of the men to those of Fukien fishermen is likewise without value, for at the time of the Spanish invasion both Ilocano and Tinguian were innocent of trousers. It was not until the order of Gov. Penñarubia, in 1868, barring all unclad pagans from the Christianized towns, that the latter donned such garments. To-day many of the men possess full suits, but the ordinary dress is still the head-band, breech-cloth, and belt.

Finally, it seems curious that the Tinguian should be of "a pacific character" because of the fact that they are descended from a band of Chinese pirates.

Summarizing our material, we can say of the Tinguian, that they are a rather short, well-built people with moderately high, brachycephalic heads, fairly high noses, and angular faces. Their hair is brown black and inclined to be wavy, while the skin varies from a light olive brown to a dark reddish brown. A study of our tables shows that within this group there are great extremes in stature, head and nasal form, color, and the like, indicating very heterogeneous elements in its make-up. We also find that physically the Tinguian conform closely to the Ilocano, while they merge without a sharp break into the Apayao of the eastern mountain slopes. When compared to the Igorot, greater differences are manifest; but even here, the similarities are so many that we cannot classify the two tribes as members of different races.

We have seen that this people approaches the southern Chinese in many respects, but this is likewise true of all the other tribes under discussion and, hence, we are not justified, on anatomic grounds, in considering the Tinguian as distinct, because of Chinese origin. The testimony of historical data and language leads us to the same conclusions. Chinese influence, through trade, has been active for many centuries along the north and west coast of Luzon, but it has not been of a sufficiently intimate nature to introduce such common articles of convenience and necessity as the composite bow, the potter's wheel, wheeled vehicles, and the like.

The anatomical data likewise prevent us from setting this tribe apart from the others, because of Japanese or Indonesian origin.

III. THE CYCLE OF LIFE

BIRTH.—The natural cause of pregnancy is understood by the Tinguian, but coupled with this knowledge is a belief in its close relationship to the spirit world. Supernatural conception and unnatural births are frequently mentioned in the traditions, and are accepted as true by the mass of people; while the possibility of increasing the fertility of the husband and wife by magical acts, performed in connection with the marriage ceremony, is unquestioned. Likewise, the wife may be affected if she eats peculiar articles of food,¹ and unappeased desires for fruits and the like may result disastrously both for the expectant mother and the child.² The close relationship which exists between the father and the unborn babe is clearly brought out by various facts; for instance, the husband of a pregnant woman is never whipped at a funeral, as are the other guests, lest it result in injury to the child.

The fact that these mythical happenings and magical practices do not agree with his actual knowledge in no way disturbs the Tinguian. It is doubtful if he is conscious of a conflict; and should it be brought to his attention, he would explain it by reference to the tales of former times, or to the activities of superior beings. Like man in civilized society, he seldom rationalizes about the well-known facts—religious or otherwise—generally held by his group to be true.

It is thought that, when a mortal woman conceives, an *anito* woman likewise becomes pregnant, and the two give birth at the same time. Otherwise, the lives of the two children do not seem to be closely related, though, as we shall see later, the mothers follow the same procedure for a time after delivery (cf. p. 268).

According to common belief, supernatural beings have become possessed at times, with menstrual blood or the afterbirth which under their care developed into human offspring, some of whom occupy a

¹ The eating of double bananas or vegetables is avoided, as it is thought to result in the birth of twins. The birth of twin girls is a particular misfortune; for their parents are certain to fare badly in any trades or sales to which they may be parties.

² The importance of gratifying the longings of pregnant women appears in the legends of the Malay Peninsula. See WILKINSON, *Malay Beliefs*, p. 46 (London, 1906). HILDEBRANDT states that the Indian law books such as *Yājñavalkya* (III, 79) make it a duty to fulfill the wishes of a woman at this time, since otherwise the embryo would be exposed to injury. *Encyclopædia of Religion and Ethics*, Vol. II, p. 650.

prominent place in the tribal mythology.¹ In the tales we are told that a frog became pregnant, and gave birth to a child after having lapped up the spittle of Aponitolau,² a maid conceived when the head-band of her lover rested on her skirt,³ while the customary delivery of children during the mythical period seems to have been from between the fingers of the expectant mother.⁴ *Anitos* and, in a few cases, the shades of the dead have had intercourse with Tinguian women,⁵ but children of such unions are always born prematurely. As a rule, a miscarriage is thought to be the result of union with the inhabitants of the spirit realm, though an expectant woman is often warned not to become angry or sorrowful lest her "blood become strong and the child be born." Abortion is said to be practised occasionally by unmarried women; but such instances are exceedingly rare, as offspring is much desired, and the chance of making a satisfactory match would be in no way injured by the possession of an illegitimate child.⁶

Except for the district about Manabo, it is not customary to make any offerings or to cause any changes in the daily life of the pregnant woman until the time of her delivery is near at hand. In Manabo a family gathering is held about a month before the anticipated event, at which time the woman eats a small chicken, while her relatives look on. After completing this meal, she places two bundles of grass, some bark and beads in a small basket and ties it beside the window. The significance of the act is not clear to the people, but it is "an old custom, and is pleasing to the spirits."

Shortly before the child is expected, two or three mediums are summoned to the dwelling. Spreading a mat in the center of the room, they place on it their outfits (cf. p. 302) and gifts⁷ for all the spirits who are apt to attend the ceremony. Nine small jars covered with *alin* leaves are distributed about the house and yard; one sits on

¹ See Traditions of the Tinguian, this volume, No. 1, pp. 124, 185.

² See *op. cit.*, p. 105.

³ See *op. cit.*, pp. 144, *et seq.*

⁴ See *op. cit.*, p. 18.

⁵ See Traditions of the Tinguian, this volume, No. 1, p. 180.

⁶ To produce a miscarriage, a secret liquor is made from the bark of a tree. After several drinks of the brew, the abdomen is kneaded and pushed downward until the foetus is discharged. A canvass of forty women past the child-bearing age showed an average, to each, of five children, about 40 per cent of whom died in infancy. Apparently about the same ratio of births is being maintained at present.

⁷ The gifts vary according to the ceremony. For this event, the offerings consist of a Chinese jar with earrings fastened into the handles—"ears"—, a necklace of beads and a silver wire about its neck; a wooden spoon, a weaving stick, and some bone beads.

a head-axe placed upon an inverted rice-mortar near the dwelling, another stands near by in a winnower, and is covered with a bundle of rice; four go to a corner of the room; while the balance is placed on either side of the doorway. These jars are later used to hold the cooked rice which is offered to the *Inginlaod*, spirits of the west. At the foot of the house ladder a spear is planted, and to it is attached a long narrow cloth of many colors. Last of all, a bound pig is laid just outside the door with its head toward the east.

When all is ready, the mediums bid the men to play on the *tong-a-tong* (cf. p. 314); then, squatting beside the pig, they stroke its side with oiled fingers, meanwhile chanting appropriate *dīams* (cf. p. 296). This done, they begin to summon spirits into their bodies, and from them learn what must be done to insure the health and happiness of the child. Later, water is poured into the pig's ear, that "as it shakes out the water, so may the evil spirits be thrown out of the place."¹ Then an old man cuts open the body of the animal and, thrusting in his hand, draws out the still palpitating heart, which he gives to the medium. With this she strokes the body of the expectant woman, "so that the birth may be easy, and as a protection against harm," and also touches the other members of the family.² She next directs her attention to the liver, for by its condition it is possible to foretell the child's future (cf. p. 307).

While the medium has been busy with the immediate family, friends and relatives have been preparing the flesh for food, which is now served. No part is reserved, except the boiled entrails which are placed in a wooden dish and set among other gifts intended for the superior beings.

Following the meal, the mediums continue summoning spirits until late afternoon when the ceremony known as *Gīpas*—the dividing—is held.³ The chief medium, who is now possessed by a powerful spirit, covers her shoulder with a sacred blanket,⁴ and in company with the oldest male relative of the expectant woman goes to the middle of the room, where a bound pig lies with a narrow cloth extending along its body from head to tail. After much debating they decide on the exact center of the animal, and then with her left hand each seizes a

¹ This is known as *palwig*.

² This action is called *tolgī*.

³ In the San Juan district *Gīpas* is a separate two-day ceremony, which takes place about nine months after the birth. In Baak a part of the *Dawak* ceremony goes by this name.

⁴ This is known as *inálson*, and is "such a blanket as is always possessed by a spirit." See p. 313.

leg. They lift the victim from the floor, and with the head-axes, which they hold in their free hands, they cut it in two. In this way the mortals pay the spirits for their share in the child, and henceforth they have no claims to it. The spirit and the old man drink *basi*, to cement their friendship; and the ceremony is at an end.

The small pots and other objects used as offerings are placed on the sacred blanket in one corner of the room, where they remain until the child is born, "so that all the spirits may know that *Giipas* has been held." A portion of the slaughtered animals and some small present are given to the mediums, who then depart.

In San Juan a cloth is placed on the floor, and on it are laid betelnuts, four beads, and a lead sinker. These are divided with the head-axe in the same manner as the pig, but the medium retains for her own use the share given to the spirits.

In the better class of dwellings, constructed of boards, there is generally a small section in one corner, where the flooring is of bamboo; and it is here that the delivery takes place, but in the ordinary dwellings there is no specified location.

The patient is in a kneeling or squatting position with her hands on a rope or bamboo rod, which is suspended from a rafter about the height of her shoulders.¹ She draws on this, while one or more old women, skilled in matters pertaining to childbirth, knead and press down on the abdomen, and finally remove the child. The naval cord is cut with a bamboo knife,² and is tied with bark cloth. Should the delivery be hard, a pig will be killed beneath the house, and its blood and flesh offered to the spirits, in order to gain their aid.

If the child is apparently still-born, the midwife places a Chinese dish close to its ear, and strikes against it several times with a lead sinker. If this fails to gain a response, the body is wrapped in a cloth, and is soon buried beneath the house. There is no belief here, as is common in many other parts of the Philippines, that the spirits of unborn or still-born children form the chief recruits for the army of evil spirits.

The after-birth is placed in a small jar together with bamboo leaves, "so that the child will grow like that lusty plant," and is then

¹ This is also the method of delivery among the Kayan of Borneo. See HOSE and MCDUGALL, *The Pagan Tribes of Borneo*, Vol. II, p. 154 (London, 1912), also COLE, *The Wild Tribes of Davao District, Mindanao* (Field Museum of Natural History, Vol. XII, No. 2, p. 100). SKEAT (*Malay Magic*, p. 334, London, 1900) describes a similar method among the Malay.

² Among the Bukidnon and Bila-an of Mindanao a bamboo blade is always employed for this purpose. The same is true of the Kayan of Borneo. HOSE and MCDUGALL, *op. cit.*, Vol. II, p. 155; COLE, *op. cit.*, p. 143.

intrusted to an old man, usually a relative. He must exercise the greatest care in his mission, for should he squint, while the jar is in his possession, the child will be likewise afflicted. If it is desired that the infant shall become a great hunter, the jar is hung in the jungle; if he is to be an expert swimmer and a successful fisherman, it is placed in the river; but ill fortune is in store for the baby if the pot is buried, for he will always be afraid to climb a tree or to ascend a mountain.

These close ties between the infant and the after-birth are easily comprehended by a people who also believe in the close relationship between a person and any object recently handled by him (cf. p. 305). In general it is thought that the after-birth soon disappears and no longer influences the child; yet certain of the folk-tales reflect a firm conviction that a group of spirits, known as *alan*, sometimes take the placenta, and transform it into a real child, who is then more powerful than ordinary mortals.¹

Immediately following the birth the father constructs a shallow bamboo framework (*baitken*),² which he fills with ashes, and places in the room close to the mother. On this a fire is kept burning constantly for twenty-nine days.³ For this fire he must carefully prepare each stick of wood, for should it have rough places on it, the baby would have lumps on its head. A double explanation is offered for this fire; firstly, "to keep the mother warm;" secondly, as a protection against evil spirits. The idea of protection is evidently the original and dominant one; for, as we shall see, evil spirits are wont to frequent a house, where a birth or death has occurred, and a fire is always kept burning below the house or beside the ladder at such a time.⁴

When the child has been washed, it is placed on an inverted rice-

¹ Traditions of the Tinguian, this volume, No. 1, p. 185. It is also the belief of the Peninsular Malay that the incidental products of a confinement may be endowed with life (WILKINSON, Malay Beliefs, p. 30).

² The character E, which appears frequently in the native names, is used to indicate a sound between the obscure vowel e, as in sun, and the *ur*, in burrow.

³ The number of days varies somewhat in different sections, and is generally longer for the first child than for the succeeding.

⁴ The custom of building a fire beside the mother is practised among the Malay, Jakun and Mantri of the Peninsula. In India, the practice of keeping a fire beside the newborn infant, in order to protect it from evil beings, is widespread. See TAWNEY, *Kathá Sarit Ságará*, Vol. I, pp. 246, 305, note; Vol. II, p. 631 (Calcutta, 1880). According to SKEAT (*Malay Magic*, p. 343), the Malay keep the fire burning forty-four days. The custom is called the "roasting of the mother." The same custom is found in Cambodja (see *Encyclopædia of Religion and Ethics*, Vol. III, pp. 32, 164, 347; Vol. VIII, p. 32).

winnower, and an old man or woman gives it the name it is to bear. The winnower is raised a few inches above the ground, and the woman asks the child its name, then drops it. Again she raises it, pronounces the name, and lets it fall. A third time it is raised and dropped, with the injunction, "When your mother sends you, you go," or "You must not be lazy." If it is a boy, it may be instructed, "When your father sends you to plow, you go."

Among the Tinguian of Ilocos Norte it is customary for the person who is giving the name to wave a burning torch beneath the winnower, meanwhile saying, if to a boy, "Here is your light when you go to fight. Here is your light when you go to other towns." If the child is a girl, she says, "Here is your light when you go to sell things."

In the San Juan district, the fire is made of pine sticks; for "the burning pine gives a bright light, and thus makes it clear to the spirits that the child is born. The heat and smoke make the child hard and sturdy." Just before the naming, the rice winnower is circled above the fire and the person officiating calls to the spirits, saying, "Come and take this child, or I shall take it." Then, as the infant still remains alive, she proceeds to give it its name.¹

A Tinguian child is nearly always named after a dead ancestor; often it receives two names—one for a relative in the father's family, and one in the mother's. A third name commemorating the day or some event, or perhaps the name of a spirit, is frequently added.² Certain names, such as Abacas ("worthless"), Inaknam ("taken up"), and Dolso ("rice-chaff") are common. If the infant is ailing, or if the family has been unfortunate in raising children, the newborn is named in the regular way, then is placed on an old rice winnower, and is carried to a refuse heap and left. Evil spirits witnessing this will think that the child is dead, and will pay no more heed to it. After a time, a woman from another house will pick the child up and carry it back to the dwelling, where it is renamed. In such a case it is probable that the new name will recall the event.³

¹ This may be related to the Malay custom of fumigating the infant (see SKEAT, *op. cit.*, p. 338).

² The following names are typical of this last class. For boys: Ab'beng, a child's song; Agdalpen, name of a spirit; Baguio, a storm; Bakileg, a glutton; Kabato, from *bato*, a stone; Tabau, this name is a slur, yet is not uncommon; it signifies "a man who is a little crazy, who is sexually impotent, and who will mind all the women say;" Otang, the sprout of a vine; Zapalan, from *zapa*, the crotch of a tree. For girls: Bangonán, from *bangōn*, "to rise, to get up;" Igai, from *nigai*, a fish; Giaben, a song; Magilai, from *gilai* the identifying slit made in an animal's ear; Sabak, a flower; Ugōt, the new leaf.

³ In Madagascar children are oftentimes called depreciative names, such as Rat, with the hope that evil spirits will leave tranquil an infant for which the parents have so little consideration (GRANDIDIER, *Ethnologie de Madagascar*, Vol. II).

If a former child has died, it is possible that the infant will receive its name, but if so, it will be renamed within a few days. In this manner, respect is shown both for the deceased child and the ancestor for which it was named; yet the newborn is not forced to bear a title which is apparently displeasing to the spirits. Continued sickness may also result in the giving of a new name.¹ In such a case a small plot of rice is planted as an offering to the spirits, which have caused the illness.

According to Reyes, the child to be named is carried to a tree, and the medium says, "Your name is —;" at the same time she strikes the tree with a knife. If the tree "sweats," the name is satisfactory; otherwise, other names are mentioned until a favorable sign is obtained.² The writer found no trace of such procedure in any part of the Tinguian belt.

For a month succeeding the birth, the mother must follow a very strict set of rules. Each day she is bathed with water in which certain herbs and leaves, distasteful to evil spirits, are boiled.³ Beginning with the second day and until the tenth she must add one bath each day, at least one of which is in cold water. From the tenth to the twenty-fourth day she takes one hot and one cold bath, and from then to the end of the month she continues the one hot bath. Until these are completed, the family must keep a strip of *ayabong* bark burning beneath the house, in order to protect the baby from evil spirits. As an additional defence, a miniature bow and arrow, and a bamboo shield, with a leaf attached, as hung above the infant's head (Fig. 4, No. 1).

On the fifth day the mother makes a ring out of old cloth, rice stalks, and a vine, and puts it on her head; over her shoulders is an old blanket, while in one hand she holds a reed staff, which "helps her in her weakness, and protects her from evil beings." She carries a coconut shell filled with ashes, a basket and a jar, and thus equipped she goes to the village spring. Arriving there, she cleans the dishes "as a sign that her weakness has passed, and that she can now care for herself;" then she sets fire to a piece of bark, and leaves it burning beside the water, as a further sign of her recovery. When she returns to the dwelling, the cleansed dishes and the staff are placed above the spot, where she and the baby sleep.

¹ In Selangor, a sick infant is re-named (SKEAT, *op. cit.*, p. 341).

² REYES, *Filipinas articulos varios*, 1st ed., pp. 144-5 (Manila, 1887).

³ The Malay of the Peninsula bathe both mother and child morning and evening, in hot water to which certain leaves and blossoms are added. It is here described as an act of purification (SKEAT, *op. cit.*, pp. 334-5).

On the 29th day the fire is extinguished, and the bamboo frame is fastened under the floor of the house, below the mother's mat, "so that all can see that the family has followed the custom." As the frame is carried out, the mother calls to the *anito* mother (cf. p. 261) to throw out her fire.

In the mountain districts about Lakub, a ceremony in which the spirits are besought to look to the child's welfare is held about the third day after the birth. The mediums summon several spirits; a chicken or a pig is killed, and its blood mixed with rice is offered up. At the conclusion a small *saloko*¹ containing an egg is attached to one end of the roof. In Ba-ak this is generally a three to six day event attended by all the friends and relatives of the family. Here, in place of the egg, a jar containing pine-sticks is attached to the roof, for the pine which burns brightly makes it plain to the spirits what the people are doing.

In the light of the extended and rather complex procedure just related, it is interesting to note that the Tinguian woman is one of those mythical beings whom careless or uninformed writers have been wont to describe as giving birth to her children without bodily discomfort. REYES² tells us that she cuts the umbilical cord, after which she proceeds to the nearest brook, and washes the clothing soiled during the birth. LERENA likewise credits her with delivering herself without aid, at whatever spot she may then chance to be; then, without further ado or inconvenience, she continues her duties as before. If she happens to be near to a river, she bathes the child; or, if water is not handy, she cleans it with grass or leaves, and then gives it such a name as stone, rooster, or carabao.³

Throughout the greater part of the Tinguian territory, nothing further of importance takes place for about two years, providing the child progresses normally, but should it be ailing, a medium will be summoned to conduct the *Ībal* ceremony.⁴ For this a pig or rooster is prepared for sacrifice, but before it is killed, the medium squats before it and, stroking its side with oiled fingers, she chants the following *dĭam*.

¹ Also called *salokang* (cf. p. 310).

² *Filipinas articulos varios*, p. 144.

³ F. DE LERENA, *Ilustracion Filipina*, No. 22, p. 254 (Manila, Nov. 15, 1860). An equally interesting account of Tinguian procedure at the time of birth will be found in the account of POLO DE LARA, *Islas Filipinas, tipos y costumbres*, pp. 213, *et seq.*

⁴ In San Juan, *Ībal* is always held in six months, unless illness has caused an earlier celebration. At this time the liver of a pig is carefully examined, in order to learn of the child's future.

“Those who live in the same town go to raid, to take heads. After they arrive, those who live in the same town, ‘We go and dance with the heads,’ said the people, who live in the same town, ‘because they make a celebration, those who went to kill.’ ‘When the sun goes down, you come to join us,’ said the mother and baby (to her husband who goes to the celebration). After that the sun truly went down; she went truly to join her husband; after that they were not (there), the mother and the baby (i. e., when the father arrived where they had agreed to meet, the mother and child were not there).

“He saw their hats lying on the ground. He looked down; the mother and the baby were in (the ground), which ground swallowed them. ‘Why (are) the mother and the baby in the ground? How can I get them?’ When he raises the mother and the baby, they go (back) into the ground. After that Kabonīyan above, looking down (said), ‘What can you do? The spirits of Ībal in Daem are the cause of their trouble. It is better that you go to the home of your parents-in-law, and you go and prepare the things needed in Ībal,’ said Kabonīyan.

“They went truly and prepared; after that they brought (the things) to the gate. After that the mother and child came out of the ground. ‘After this when there is a happening like this, of which you Īpogau are in danger, you do like this (i. e., make the Ībal ceremony); and I alone, Kabonīyan am the one you summon,’ said Kabonīyan.

“After that they got well because they came up, the mother and the baby.”

When the chant is finished, the animal is slaughtered, and food is prepared both for guests and spirits. Following the instructions of Kabonīyan, the latter is placed at the entrance to the village; after which it is possible that this powerful spirit will visit the gathering in the person of the medium, and give further instructions for the care of the infant.

In the village of Lakub the writer witnessed a variation of this ceremony which, it is said, is also followed in case the pregnancy is not progressing favorably. A piece of banana stalk, wrought into the form of a child, and wearing a bark head-band, was placed on the mat beside the medium. She, acting for a spirit, seized the miniature shield and bow and arrow which hung above the baby, and attempted to shoot the figure. Immediately two old women came to the rescue of the image, and after a sharp tussel compelled the spirit to desist. They then secured the weapons, and in their turn tried to shoot the figure, which was now defended in vain by the medium. It was later explained that, in the first place, the figure represented the child, and

had the spirit succeeded in shooting it, the babe would have died; later, it impersonated the child of the spirit, and when that being saw its own offspring in danger, it immediately departed from the village. Several other spirits then entered the body of the medium, and after receiving food and drink, gave friendly advice.

When the child is about two years old, a ceremony known as *Olog*¹ is held. The mediums who are summoned prepare a spirit mat,² and at once begin to recite *dīams* over the body of a bound pig. As soon as the animal is killed, its heart is removed, and is rubbed against the breast of each member of the family. The medium then resumes her place at the mat, and soon is possessed by a spirit who takes charge of the proceedings. At his suggestion, the child is rubbed from head to foot with the thread from the medium's outfit, "so that it will not cry any more;" next, he orders that the intestines of the pig be cleaned, placed on a wooden dish, and be carried to the gate of the town. When they arrive at the designated spot, the mediums make a "stove" by driving three sticks into the ground, so as to outline a triangle, and within these they burn a bundle of rice-straw. Beside the "stove" is placed a branch, each leaf of which is pierced with a chicken feather. This completed, the child is brought up to the fire, and is crowned with the intestines; while one of the mediums strikes the ground vigorously with a split stick,³ to attract the attention of the spirits. Next, she secures a rooster, and with this in one hand and a spear in the other, she marches five times around the fire meanwhile reciting a *dīam*. At the conclusion of this performance the fowl is killed; and its blood, mixed with rice, is scattered on the ground. At the same time the medium calls to all the spirits to come and eat, to be satisfied, and not cause the child to become ill. The flesh and rice cakes are likewise offered, but after a few moments have elapsed, they are eaten by all the people.

At the conclusion of the meal, a wreath of vines is substituted for the intestines, which are hung beside the fire. This concludes the ceremony; but, as the mother and child reach the ladder of their home, the people above sprinkle them with water, meanwhile calling out eight times, "You are in a heavy storm." The significance of this sprinkling is not known, but the custom is widespread, and is evidently very ancient.

¹ In Likuan this takes place five days after the birth; in Sallapadan it occurs on the first or second day.

² On the mat are placed, in addition to the medium's regular outfit, a small jar of *basi*, five pieces of betel-nut and pepper-leaf, two bundles of rice (*palay*) in a winnow, a head-axe, and a spear.

³ This is a *dakīdak* (cf. p. 311).

In the mountain village of Likuan, a man who wears a very large hat takes the child to a nearby *saloko*. As he returns, he is sprinkled by a medium, who says, "You are wet from the rain; in what place did you get wet?" He replies, "Yes, we are wet from the rain; we were wet in Inakban (a town of the spirits);" then placing two small baskets in the *saloko*, he carries the child into the dwelling. Soon the father appears and goes about inquiring for his wife and child; suddenly spying the baskets, he seizes them and takes them into the house, saying, "Here are the mother and the child."

The following morning, the women place rice cakes and betel-nuts, ready to chew, in leaves, and tie them to a bamboo stalk with many branches. This is then planted beside the spring, "so that the child will grow and be strong like the bamboo." The sight of all these good things is also pleasing to the spirits, and they will thus be inclined to grant to the child many favors.

When the women return to the house, they carry with them a coconut shell filled with water, and with this they wash the infant's face "to keep it from crying, and to keep it well." This done, they tie a knot of banana leaves to the house ladder as a sign that no person may enter the dwelling until after its removal the next day.¹

A ceremony, not witnessed by the writer, is said to take place when evil spirits have persistently annoyed the mother and the child, when the delivery is long overdue, or when an *anito* child² has been born to a human mother. The husband and his friends arm themselves with long knives or head-axes, and enter the dwelling, where they kill a rooster. The blood is mixed with rice; and this, together with nine coconut shells filled with *basi*, is placed beneath the house for the *anitos* to eat. While the spirits are busy with this repast, the mother, wrapped in a blanket, is secretly passed out a window and taken to another house. Then the men begin shouting, and at the same time slash right and left against the house-posts with their weapons. In this way the evil spirits are not only kept from noticing the absence of the mother, but are also driven to a distance. This procedure is repeated under nine houses, after which they return to the dwelling with the woman. As soon as they reach the top of the ladder, an old woman throws down ashes "to blind the eyes of the

¹ Such a taboo sign is here known as *kanyau*. It is not always used at the conclusion of this ceremony, but is strictly observed following the cutting of the first rice.

² That is, a premature child.

anitos, so that they cannot see to come up.”¹ She likewise breaks a number of small jars, “which look like heads,” as a threat of the treatment which awaits them if they attempt to return to the house.

Within the dwelling food and presents are offered to the good spirits, and all who have participated in the *anito* driving are feasted.

Next morning, a wash, said to be particularly distasteful to the evil *anito*, is prepared. It consists of water in which are placed lemon, bamboo, and *atis* leaves, a cigar stub, and ashes from burned rice straw. The family wash in this mixture, and are then fully protected against any evil spirits, which may still remain after the terrifying events of the previous night.

CHILDHOOD.—When outside the house, small babies are always carried by their mothers or older sisters (Plate XV). The little one either sits astride its mother’s hip or fits against the small of the back, and is held in place by her arm or by a blanket which passes over one shoulder. From this position the infant is readily shifted, so that it can nurse whenever it is hungry. There are no regular periods for feeding, neither is there a definite time for weaning. Most children continue to nurse until quite large, or until they are displaced by newcomers. However, they are given some solid food, such as rice, while very young, and soon they are allowed to suck sugar-cane and sweet potatoes. It is also a common thing to see a mother take the pipe from her mouth, and place it in that of her nursing infant. They thus acquire the habit of using tobacco at a very early age, and continue it through life, but apparently without evil effects. Weaning is accomplished by rubbing the breasts with powdered chile peppers, or plants with sour flavor.

A crib or sleeping basket is made out of bamboo or rattan, and this is attached to the center of a long bamboo pole, which is suspended across one corner of the room (Fig. 1, No. 2). The pole bends with each movement of the child, and thus it rocks itself to sleep. Another device in which small children are kept is known as *galong-galong*. This consists of a board seat attached to a strip of split rattan at each corner. Sliding up and down on these strips are vertical and horizontal pieces of reed or bamboo, which form an open box-like frame (Fig. 1, No. 1). The reeds are raised, the child is put in, and then they are slipped back in place. This device is suspended from a rafter, at such a height that it can serve either as a swing or walker, as desired.

When the mother goes to the village spring or to the river, she

¹ Ashes are used against evil spirits by the Peninsular Malay (SKEAT, Malay Magic, p. 325).

carries her baby with her, and invariably gives it a bath in the cold water. This she applies with her hand or a coconut shell, and frequently she ends the process by dipping the small body into the water. Apparently, the children do not enjoy the ordeal any more than European youngsters; but this early dislike for the water is soon overcome, and they go to the streams to paddle and play, and quickly become excellent swimmers. They learn that certain sluggish fish

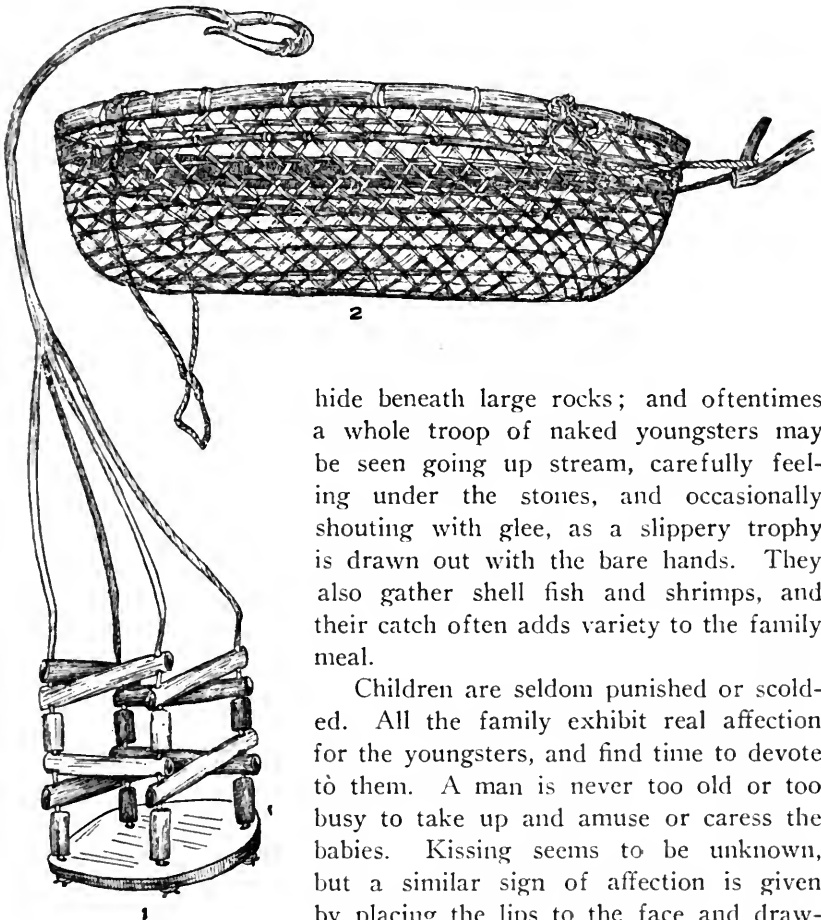


FIG. 1.

CHILD'S CRADLE AND JUMPER.

hide beneath large rocks; and oftentimes a whole troop of naked youngsters may be seen going up stream, carefully feeling under the stones, and occasionally shouting with glee, as a slippery trophy is drawn out with the bare hands. They also gather shell fish and shrimps, and their catch often adds variety to the family meal.

Children are seldom punished or scolded. All the family exhibit real affection for the youngsters, and find time to devote to them. A man is never too old or too busy to take up and amuse or caress the babies. Kissing seems to be unknown, but a similar sign of affection is given by placing the lips to the face and drawing the breath in suddenly. A mother is often heard singing to her babes, but the songs are usually improvised, and generally consist of a single sentence repeated over and over.

Aside from the daily bath, the child has little to disturb it during the first five or six years of its life. It has no birthdays, its hair is never cut, unless it be that it is trimmed over the eyes to form bangs, and it wears clothing only on very special occasions. The children are by no means innocent in sexual matters; but absolute familiarity with nudity has removed all curiosity and false modesty, and the relations between the sexes are no freer than in civilized communities.

When garments are put on, they are identical with those worn by the elders. At all ages the people will discard their clothing without any sense of shame, whenever the occasion demands; as, for instance, the fording of a stream, or when a number of both sexes happen to be bathing at the same time in the village pool. This does not lead to immodesty or lewdness, and a person who is careless about the acts, which are not considered proper in Tinguian society, is an object of scorn quite as much as he would be in a more advanced community.

The first toys generally consist of pigs, carabao, or horses made by sticking bamboo legs into a sweet potato or mango. A more elaborate plaything is an imitation snake made of short bamboo strips fastened together with cords at top, center, and bottom. When this is held near the middle by the thumb and forefinger, it winds and curls about as if alive.

Stilts of bamboo, similar to those used in America, are sometimes used by the older children, but the more popular local variety is made by fastening cords through the tops of half coconut shells. The youth holds a cord in each hand, stands on the shells with the lines passing between the first two toes, and then walks.

Flat boards with cords attached become "carabao sleds," and in these immense loads of imaginary rice are hauled to the granaries. A similar device serves as a harrow, while a stick is converted into a "plough" or "horse," as is desired. Imitation carabao yokes are much prized, and the children pass many hours serving as draught animals or drivers. The bull-roarer, made by putting a thin piece of bamboo on a cord and whirling it about the head, makes a pleasing noise, and is excellent to use in frightening stray horses. Blow-guns, made out of bamboo or the hollow tubes of plants, vie in popularity with a pop-gun of similar construction. A wad of leaves is driven through with a plunger, and gives a sharp report, as it is expelled.

Tops are among the prized possessions of the boys. They are spun, or are wound with cord, and are thrown overhand at those of other players, with the intention of splitting or marking them.

Quite as popular, with the small girls, are tiny pestles with which they industriously pound rice chaff, in imitation of their mothers.

While still mere babies, the boys begin to play with toy knives made of wood, but by the time they are seven or eight years of age, they are permitted to carry long *bolos*, and before puberty they are expert with the weapons used by the tribe (Plate XI). In the mountain regions in particular, it is a common occurrence for groups of youngsters, armed with reed spears and palm-bark shields, to carry on mock battles. They also learn to make traps and nets, and oftentimes they return to the village with a good catch of small birds.

Full grown dogs are seldom friendly or considered as pets; but puppies, small chickens, parrakeets, pigs, and baby carabao make excellent playfellows, and suffer accordingly. From the day of its birth, the young carabao is taken possession of by the children, who will fondle and tease it, ride on its back, or slide off over its head or tail. Soon they gain confidence, and find similar amusements with the full grown animals. These huge beasts are often surly or vicious, especially around white men, but they recognize their masters in the little brown folk, and submit meekly to their antics. In fact, the greater part of the care of these animals is entrusted to young boys.

When not engaged in some of the amusements already mentioned, it is probable that the youngster is one of the group of naked little savages, which races through the village on the way to the swimming hole, or climbs tall trees from the top of which sleeping pigs can be easily bombarded. Should the children be so fortunate as to possess a tin can, secured from some visiting traveller, they quickly convert it into a drum or *gansa*, and forthwith start a celebration. All can dance and sing, play on nose flutes, bamboo guitars, or Jew's harps.

In addition to songs of their own composition, there are other songs, which are heard whenever the children are at play. They make a swing by tying ropes to a carabao yoke, and attach it to a limb; then, as they swing, they sing:

"Pull swing. My swing is a snake.

"Do not writhe like a snake. My swing is a big snake.

"Do not turn and twist. My swing is a lizard.

"Do not tremble or shake."

When a group gathers under a house to pop corn in the burning rice chaff, they chant:

"Pop, pop, become like the privates of a woman.

"Make a noise, make a noise, like the clay jar.

"Pop, pop, like the coconut shell dish.

"Sagai, sagai,¹ make a noise like the big jar."

When the smoke blows toward a part of the children, the others sing over and over:

"Deep water here; high land there."

¹ Sagai is the sound made when scratching away the embers of a fire.

A favorite game is played by a number of children. Part stand on the edge of a bank, part below. Those above sing, "Jump down, where the big stone is, the big stone which swallows people. Big stone, which swallows people, where are you?" To this the children below reply, "I am here. I am the big rock which swallows men. Come down here." As those on the bank jump down, they are piled upon, and a free-for-all tussel ensues. In the midst of this, one of the players suddenly sings out, "I am a deer in—, I am very fat." With this he starts off on a run, and the rest of the party, now suddenly transformed into dogs, take up the chase, yelping and barking. When the deer becomes tired, he makes for the water, where he is considered safe; but if he is caught, he is rolled and bitten by the dogs.

Another game played by both boys and girls is known as *maysansani*, and is much like hide-and-go-seek. One boy holds out an open hand, and the others lay their fingers in his palm, while the leader counts, *maysansani, duan-nani, matalali,¹ ocop.* As *ocop* ("four" or "ready") is pronounced, the boy quickly closes his hand in order to catch a finger. If he succeeds, the prisoner puts his hands over his eyes, and the leader holds him, while the others run and hide. When all are ready, he is released, and then must find all the players; or he is beaten on the forearm with the first and second fingers of all the participants, or they may pick him up by his head and feet, and whirl him about.

Like European children, they have a set of small sayings or acts for use on appropriate occasions. A youngster may come up to another who is eating a luscious mango; when requested for a bite, he is apt to draw down the lower lid of his eye and coolly answer, "I will make a sound like swallowing for you," and then go on with the feast. He may even hold out the tempting fruit, as if to comply with the request, then suddenly jerk it back and shout "kilat."² This is often the signal for a scuffle.

As the children grow older, they begin more and more to take their place in the village life. The little girl becomes the chief guardian of a new arrival in the family; and with the little one strapped on her back, she romps and plays, while the baby enjoys it all or sleeps serenely (Plate XII). The boy also assists his father and mother in the fields, but still he finds some time for games of a more definite character than those just described. Probably the most popular of these is known as *agbita* or *lipī*.

¹ From *maysa*, one; *dua*, two; *talo*, three.

² This is also used as mockery. It has no exact English equivalent, but is similar to our slang "rubber."

This is played with the large disk-shaped seeds of the *lipi* plant (Ilocano *lipai*). Each player puts two disks in line, then all go to a distance and shoot toward them. The shooter is held between the thumb and first finger of the left hand, and is propelled forward by the index finger of the right. The one whose seed goes the farthest gets first shot, and the others follow in order. All seeds knocked down belong to the player, and if any are still in line after each has had his turn, the leader shoots again. When each boy has had two shots, or when all the disks are down, a new line is made; and he whose seed lies at the greatest distance shoots first.

Another common game is *patpatinglad*, which has certain resemblances to cricket. A small cylinder-shaped missel, called *papa-anak* ("little duck"), about four inches long, is set in a shallow groove, so that one end stands free; it is then struck and batted with a bamboo stock—*papa-ina* ("mother duck"). The lad who has driven his missel the farthest is the winner, and hence has the privilege of batting away the *papa-anak* of the other players, so that they will have to chase them. If he likes, he may take hold of the feet of a loser and compel him to walk on his hands to secure this missel. A loser is sometimes taken by the head and feet, and is swung in a circle.

A game frequently seen in the lowland valleys is also common to the Ilocano children, who call it San Pedro. Lines are drawn on the ground to enclose a space about thirty feet square (see diagram Fig. 2). The boys at d try to run between the lines, and at the same time evade the guards a, b, and c. Guard a can run along line 1, or 4 as far as 2. Guard b must stay on line 2; and c must keep on 3. When the runners are captured, they become the guards.

From the preceding paragraphs it may be surmized that the youth is quite untrained and untaught. It is true that he spends no time in

a class-room; he passes through no initiation at the time of puberty, neither are there ceremonies or observances of any kind which reveal to him the secret knowledge of the tribe, yet he quickly learns his place

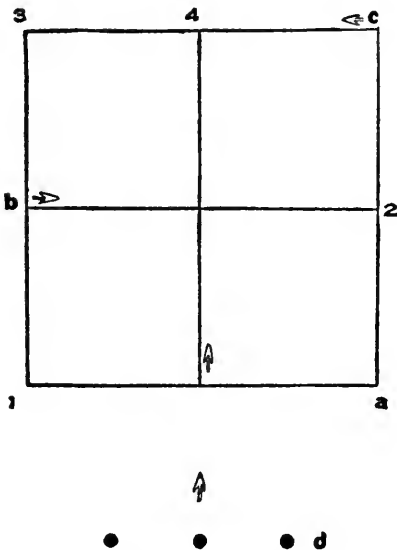


FIG. 2.
DIAGRAM OF A GAME.

in society, and at an early age begins to absorb its customs and beliefs. He sits about the village fires in the evenings, and listens to the tales of long ago, or hears the elders discuss the problems of their daily life. During the hot midday hours, he lounges in the field-houses, while his parents relate the fate of lazy children; or tell of punishments sent by the spirits on those who fail to follow the customs of the ancestors, or give heed to the omens. He attends the ceremonies, where he not only learns the details of these important events, but with his own eyes sees the bodies of the mediums possessed by superior beings, and thus the close relationship of the spirit world to his people is forcibly brought to his notice. He is never debarred from the dances or other activities; in fact, he is encouraged to take part in them or to imitate his elders. Soon custom gathers him into its net, and unless he is the exceptional individual, or comes in intimate contact with outsiders, he never escapes.

It has already been seen that he begins very early to take an active part in the village life, but it is many years before he assumes a position of importance in the group. It is only when age and experience have gained for him the respect of his fellows that he begins to have a voice in the more weighty affairs of Tinguian life.

ENGAGEMENT AND MARRIAGE.—Since there are no clans or other groupings to limit the number of families in which unions may be contracted, the only impediments are former marriage ties or blood relationship. Cousins may not marry, neither is a man allowed to wed his step-sister, his wife's sister, or her mother.

Engagement takes place while the children are very young, sometimes while they are still babes-in-arms; but usually the contract is made when they are six or eight years of age.

The boy's parents take the initiative, and having selected a suitable girl, they broach the subject to her family. This is not done directly, but through an intermediary, generally a relative, "who can talk much and well." He carries with him three beads—one red, one yellow, and one agate,¹ which he offers "as an evidence of affection," and then proceeds to relate the many desirable qualities of the groom and his family, as well as the advantages to be gained by the union. If the suit is favored, the beads are attached to the girl's wrist as a sign of her engagement, and a day is set for the *pakálon*² or price fixing.

¹ In Patok only the agate bead (*napodau*) is used.

² The less pretentious gathering, held by the very poor, is known as *pólya*.

On the appointed day, friends and relatives gather at the girl's home and, after several hours of feasting and drinking, settle down to the real business on hand. A large pig is slaughtered, and its liver is carefully examined; for, should the omens be unfavorable, it would be useless to continue the negotiations further at that time (cf. p. 307). If the signs are good, the happy crowd forms a circle, and then begins a long and noisy discussion of the price which the girl should bring. Theoretically, the payment is made in horses, carabao, jars, blankets, and rice, but as each article is considered as having a value of five pesos (\$2.50), the money is frequently substituted, especially by people in poor circumstances.

A portion of the agreed price is paid at once, and is distributed between the girl's parents and her relatives, who thus become vitally interested in the successful termination of the match; for should it fail of consummation, they must return the gifts received. The balance of the payment is often delayed for a considerable time, and it not infrequently happens that there is still a balance due when the man dies. In such a case no division of his property can be made until the marriage agreement is settled in full.

The completion of the list is the signal for great rejoicing; liquor circulates freely, the men sing *daleng* (cf. p. 440), and *tadek* (cf. p. 440) is danced far into the night.

In the yard where the dancing takes place, three inverted rice-mortars are placed one above the other, "to serve as a table for the spirits who always attend." A dish of liquor is placed on it, while at its side is a spear decorated with a man's belt.

These engagement-parties are the great social affairs of the year, and friends will journey long distances to be present, but the betrothed couple is seldom in evidence, and in many instances the groom is absent.

Following their engagement the children live with their parents until such a time as they are considered old enough to maintain their own home. If the lad comes from a well-to-do family, it is probable that the final ceremony will take place before either of the couple reaches puberty; but, if the groom must earn a living, the marriage may be delayed until he is eighteen or nineteen years old (Plate XIII).

When the time for the fulfillment of the agreement arrives, the boy goes, in company, at night to the girl's house. He has a head-axe hanging from his belt, but he is the only one so armed. An earlier writer¹ has described a feigned attack on the house of the bride as

¹ WORCESTER, The Non-Christian Tribes of Northern Luzon (*Philippine Jour. of Science*, Vol. I, No. 8, 1906, p. 858).

a part of the marriage ceremony, but the present writer did not witness anything of the sort, nor could he learn of any such action.

The groom carries with him a small part of the marriage payment and a valuable jar; these he presents to his parents-in-law, and from that time on he may never call them or their near relatives by name. Should he do so, "he will have boils and the first child will be insane."

The bride's people have provided a coconut shell filled with water and a wooden dish¹ containing cooked rice. These are placed between the couple, as they sit in the center of the room (Plate XIV). The boy's mother drops two beads into the shell cup, and bids them drink; for, "as the two beads always go together at the bottom, so you will go together and will not part. The cool water will keep you from becoming angry."

Great care must be exercised in handling the cup; for should the contents be shaken the couple will become dizzy, and in old age their heads and hands will shake. After they have drunk, each takes a handful of rice, and squeezes it into a ball. The girl drops hers through the slits in the bamboo floor as an offering to the spirits, but the boy tosses his into the air. If it breaks or rolls, it is a bad sign, and the couple is apt to part, or their children die. In such a circumstance, the marriage is usually deferred, and tried again at a later date; but repeated scattering of the rice generally results in the annulling of the agreement.² Should anything in the dwelling fall or be broken during the ceremony, it is halted at once; to proceed further that night would be to court misfortune. However, it may be undertaken again a few days later.

The guests depart immediately after the rice ceremony. No food or drink is offered to them, nor is there any kind of celebration.³

¹ It is necessary to use a shallow dish with a high pedestal known as *dias* (Fig. 5, No. 5).

² In Ba-ak the breaking and scattering of the rice ball is considered a good omen, as it presages many children. In San Juan the youth throws a rice ball at the ridge pole of the house, and the girl's mother does the same. In this instance, each grain of rice which adheres to the pole represents a child to be born.

³ The similarity of the Tinguian rice ceremony to that of many other Philippine tribes is so great that it cannot be due to mere chance. Customs of a like nature were observed by the writer among the Bukidnon, Bagobo, Bila-an, Kulaman, and Mandaya of Mindanao, and the Batak of Palawan; they are also described by REED and WORCESTER for the Negrito of Zambales and Bataan; while LOARCA, writing late in the sixteenth century, records a very like ceremony practised by a coast group, probably the Pintados. At the same time it is worthy of note that JENKS found among the Bontoc Igorot a great divergence both in courtship and marriage. Among the Dusun of British North Borneo the marriage of children of the well-to-do is consummated

That night the couple sleep with a pillow between them,¹ and under the groom's pillow is a head-axe. Early in the morning, the girl's mother or some other elderly female of her family awakens them, and leads the way to the village spring. Arriving there, she pours water in a coconut shell, which contains a cigar from which the couple have drawn smoke;² she adds leaves of bamboo and *agiwás*, and washes their faces with the liquid, "to show that they now have all in common; that the tobacco may keep them and their children from becoming insane; that the *agiwás* will keep them in health; and the bamboo will make them strong and insure many children, the same as it has many sprouts." On their way home, the boy cuts a *dangla* shrub (*Vitex negundo* L.) with his head-axe, and later attaches it to the door of their home, "so that they may have many children."

Throughout that day the doors and windows are kept tightly closed; for should the young people see birds or chickens having intercourse, they are apt to become insane, and their first born have sore or crossed eyes.

The next morning is known as *sipsipót* ("the watching"). Accompanied by the girl's parents, the couple goes to the father's fields. On the way they carefully observe any signs which animals, birds, or nature, may give them. When they reach the fields, the boy shows his respect for his elders by cutting the grass along the borders with his head-axe. This service also counteracts any bad sign which they may have received that morning. He next takes a little of the soil on his axe, and both he and his bride taste of it, "so that the ground will yield good harvests" for them, and they will become rich.³

by the eating of rice from the same plate. Other instances of eating together, as a part of the marriage ceremony in Malaysia, are given by CRAWLEY. See COLE, *The Wild Tribes of Davao District, Mindanao* (Field Museum of Natural History, Vol. XII, No. 2, pp. 102, 144, 157, 192); REED, *Negritos of Zambales* (*Pub. Ethnological Survey*, Vol. II, pt. 1, p. 58 (Manila, 1904)); WORCESTER, *Philippine Journal of Science*, Vol. I, p. 811 (Manila, 1906); LOARCA, *Relacion de las Yslas Filipinas*, Chap. X (Arevalo, 1580), translated in BLAIR and ROBERTSON, *The Philippine Islands*, Vol. V, pp. 157, *et seq.*; JENKS, *The Bontoc Igorot* (*Pub. Ethnological Survey*, Vol. I, pp. 68, *et seq.*, Manila, 1905); EVANS, *Journ. Royal Anth. Inst.*, Vol. XLVII, p. 159; CRAWLEY, *The Mystic Rose* (London, 1902), pp. 379, *et seq.*

¹ In Manabo an old woman sleeps between them. Among the Bagobo and Kulaman, of Mindanao, a child is placed between the pair. See COLE, *op. cit.*, pp. 102, 157.

² In Likuan they chew of the same betel-nut. Among the Batak of Palawan they smoke of the same cigar.

³ This part of the ceremony is now falling into disuse.

Nowadays the couple goes to the home, prepared by the groom and his parents, as soon as it is ready, but the tales indicate¹ that in former times they lived for a time with the boy's parents. They are accompanied by the groom's mother, and go very early in the morning, as they are then less apt to receive bad signs from the birds. The girl carries her sleeping mat and two pillows; but before she has deposited these in her new dwelling, she seats herself on the bamboo floor with her legs stretched out in front. It then becomes necessary for the groom to present her with a string of agate beads equal in length to the combined width of the bamboo slats which she covers. Before she can eat of her husband's rice, he must give her a string of beads, or she will become ill; she may not open his granary until a like present has been given, or the resident spirit will make her blind; neither may she take food from the pots or water from the jars, until other beads have been presented to her.

If the girl comes from another village, it is customary to make a payment to her parents for each stream crossed on the journey to the new home; another is demanded before she goes up the house ladder, and still others when she enters the house, and her belongings are brought in.²

A common occurrence in Ba-ak and the San Juan district is for the parents of the girl to spread rows of baskets, Chinese plates or jars on the floor and to offer them to the groom. Before he can accept them, he must make a return gift of money, beads, and the like for each one. It is explained by the elders that, when the young people see all the gifts spread out on the floor, they will appreciate the expense involved, and will be less likely to separate.

If at any time the relatives of the girl have reason to doubt the husband's affection, they go to his home, and hold a gathering known as *nagkakaoló-nan*. They place a pig, a jar, and a number of baskets on the floor; and the husband is obliged to exchange money and other gifts for them, if he desires to convince the people of his continued love. After the pig has been served as food, the old men deliberate; and should they decide that the relatives have erred, they assess the

¹ See Traditions of the Tinguian, this volume, No. 1, p. 12.

² Here again the Tinguian ceremony closely resembles the ancient custom described by LOARCA. In his account, the bride was carried to the house of the groom. At the foot of the stairway she was given a present to induce her to proceed; when she had mounted the steps, she received another, as she looked in upon the guests, another. Before she could be induced to set down, to eat and drink, she was likewise given some prized object. LOARCA, *Relacion de las Yslas Filipinas*, Chap. X; also BLAIR and ROBERTSON, *op. cit.*, Vol. V, p. 157

whole cost of the gathering to the plaintiffs, and return the gifts. If the charge is sustained, the relatives recover the price of the pig, and retain the articles received in exchange for the baskets and dishes.

Divorce is not uncommon, and is effected by a council similar to that just described. An attempt to reconcile the couple is made, but if that fails, the old men decide who is at fault, and assess the expenses of the gathering to that one. If blame attaches to the husband, he must complete any part of the marriage price still due; but if the woman is guilty, her parents and relatives must return the gifts distributed at the time of the engagement. The chief causes for divorce are cruelty or laziness on the part of the man, or unfaithfulness of the woman.

Small children are generally left with the mother, but when they are old enough to decide, they may choose between their parents. However, the father must aid in the support of his offspring, and they share in his property when he dies. Either party to a divorce may remarry at any time.

The Tinguian recognize only one wife, but a man may have as many concubines (*pota*), as he can secure. The *pota* lives in a house of her own, but she is held somewhat in contempt by the other woman, and is seldom seen in the social gatherings or in other homes. Her children belong to the father, and she has no right of appeal to the old men, except in cases of cruelty. Men with concubines do not suffer in the estimation of their fellows, but are considered clever to have won two or three women.

The *pota* is generally faithful to one man, and prostitution is almost unknown. Unfaithfulness on the part of a betrothed girl, or wife, or even a *pota* is almost certain to cause serious trouble, and is likely to end in a murder.

The early pledging and marriage of the children has reduced illicit sexual intercourse to a minimum; nevertheless, it sometimes happens that an unbetrothed girl, not a *pota*, is found to be pregnant. In such a case the man is expected to make a gift of about one hundred pesos to the girl's people, and he must support the child when finally it comes into his keeping. Neither party to such an occurrence loses standing in the community unless the father should fail to redeem the child. Should this happen, he would be a subject of ridicule in the community, and a fine might also result. The usual outcome of such an illicit union is that the girl becomes the *pota* of her child's father.

DEATH AND BURIAL.—Sickness and death are usually caused by unfriendly spirits;¹ sometimes Kadaklan himself thus punishes those

¹ See Traditions of the Tinguian, this volume, No. 1, p. 172. The origin of death is also given in the tales, *ibid.*, p. 177.

who refuse to obey the customs; sometimes they are brought about by mortals who practise magic, or by individuals themselves as punishment for violated taboos; and finally violent death is recognized as coming from human agency.

The methods of cajoling the spirits, of overcoming magic, and thwarting evil designs are discussed in another chapter (cf. pp. 295 *et seq.*). If all these fail, and the patient dies, the family and relatives at once don old garments, and enter on a period of mourning, while friends and relatives assist in the disposal of the corpse.

A funeral is a great event in a Tinguian village. The dead is bathed, "so that his spirit¹ may be clean," and is placed in a bamboo seat at the end of the house. This seat, which is known as *sangádel*, is constructed by placing three long bamboo poles against the wall and resting a frame of bamboo slats on them, to a height of about three feet. A mat is attached to the top, and is stretched onto the floor in front.

The corpse is dressed in its best garments, beads and silver wire surround its neck, while above and about it are many valuable blankets, belts, clouts, woven skirts, and the like, which the spirit is to take with him to the ancestors in Maglawa, his future home. A live chicken is placed behind the chair as an offering, but following the funeral it becomes the property of the friend, who removes the poles from the house. The flesh of a small pig is also offered to the spirits, while the intestines are hung just outside the door, until the body is buried. In the yard at the north-east corner of the house stands an inverted rice-mortar on which is a dish of *basi*,—an offering to the spirit Al-lot, who in return prevents the people from becoming angry.

The needs of the spirit of the deceased are looked after by the members of the family. It is their duty to place two small jars of liquor near to the corpse and to bring food to it, when the others are eating.

Up to this point only those spirits who attend the ceremony with friendly intent have been provided for, but the Tinguian realize that there are others who must be kept at a distance or at least be compelled to leave the body unharmed. The first of these evil beings to be guarded against is Kadongáyan,² who in former times used to attend each funeral and amuse himself by sliting the mouth of the

¹The spirit of the dead is generally known as *kalading*, but in Manabo it is called *kal-kolayó* and in Likuan *alalya*; in Ilokano, *al-aliá* means "phantom" or "ghost."

²In some villages Selday is the spirit against whom this precaution is taken.

corpse, so that it extended from ear to ear. Through the friendly instruction of Kabonīyan it was learned that, if a live chicken, with its mouth split down to its throat, were fastened to the door of the house, its suffering would be noticed by the evil spirit, who, fearing similar treatment, would not attempt to enter the dwelling.¹

The spirit *Ībwa* is also much feared.² Long ago he used to mingle with the people in human form, without harming them, but the thoughtless act of a mourner started him on the evil course he has since pursued. In those times, it is said, the corpse was kept in the dwelling seven days; and, as the body decomposed, the liquid which came from it was caught in dishes, and was placed in the grave. On the occasion referred to, he was handed a cup of the "lard" to drink. He immediately acquired a great liking for this disgusting dish, and frequently even devoured the body as well. Since he fears iron, it is possible to drive him away by using metal weapons. It is also necessary to guard the grave against him and the spirit *Selday*, who demands blood or the corpse.

Akop is another evil spirit, who has a head, long slimy arms and legs, but no body. He is always near the place of death, awaiting an opportunity to embrace the spouse of the deceased, and once let the living feel his cold embrace, death is sure to follow. So a barricade of pillows is erected at one corner of the room, and behind this the wife is compelled to remain during the three days the body is kept in the house, while throughout the night she sleeps under a fish net, in the meshes of which the long fingers of the spirit are sure to become entangled. Meanwhile, two or three old women sit near the corpse fanning it and wailing continually, at the same time keeping close watch to prevent the spirits from approaching the body or the widow (Plate XVI). From time to time the wife may creep over to the corpse, and wailing and caressing it beg the spirit not to depart.³ According to custom, she has already taken off her beads, has put on old garments and a bark head-band, and has placed over her head a

¹ In Daligan and some other villages in Ilocos Norte, a chicken is killed, is burned in a fire, and then is fastened beside the door in place of the live bird.

² See Traditions of the Tinguian, this volume, No. 1, p. 181.

³ During the funeral of Malakay, in Patok, August 16, 1907, the wife kept wailing, "Malakay, Malakay, take me with you where you go. Malakay, Malakay, take me with you. I have no brother. We were together here, do not let us part. Malakay, take me with you where you go."

large white blanket, which she wears until after the burial.¹ Likewise all the relatives don old garments, and are barred from all work. The immediate family is under still stricter rules. Corn is their only food; they may not touch anything bloody, neither can they swing their arms as they walk. They are prohibited from mounting a horse, and under no circumstances are they allowed to leave the village or join in merry-making. Failure to obey these rules is followed by swift punishment, generally meted out by the spirit of the dead.² Except for the wife, these restrictions are raised after the blood and oil ceremony (described in a later paragraph), but the widow continues in mourning until the Layog is celebrated, at the end of a year.

According to many informants among the older men, it was formerly necessary, following the death of an adult, for the men to put on white head-bands and go out on a head-hunt. Until their return it was impossible to hold the ceremony which released the relatives from the taboo.³ During the first two days that the body is in the house, the friends and relatives gather to do honor to the dead and to partake of the food and drink, which are always freely given at such a time; but there is neither music, singing, or dancing.⁴

On the morning of the third day, the male guests assemble in the yard, and after drinking *basi* they select one of their number and proceed to beat him across the wrist or thigh, with a light rod (Plate XVII). Two hundred blows are required, but since the stick is split at one end only, one hundred strokes are given. This whipping is not severe, but the repeated blows are sufficient to cause the flesh to swell. As soon as the first man is beaten, he takes the rod and then proceeds to apply one hundred and fifty strokes⁵ to each man

¹ In Manabo the wife is covered at night with a white blanket, but during the day she wears it bandoleer fashion over one shoulder. In Ba-ak a white blanket with black border is used in a similar way. If the wife has neglected her husband during his illness, his relatives may demand that she be punished by having a second blanket placed over her, unless she pays them a small amount. It sometimes occurs that the Lakay or old men impose both fine and punishment. In Likuan the blanket is placed over the corpse and the wife.

² See Traditions of the Tinguian, this volume, No. 1, p. 180.

³ This is still the case among the Apayao who live to the north of the Tinguian (COLE, *Am. Anthropologist*, Vol. ii, No. 3, 1909, p. 340). The custom is reflected in the folk-tales (Traditions of the Tinguian, this volume, No. 1, p. 190; cf. also p. 372).

⁴ The writer has known of instances, where towns were deserted following an epidemic of smallpox, and the dead were left unburied in the houses. Such instances are unusual even for this dread disease, and the funeral observances usually expose large numbers of the people to infection.

⁵ In San Juan only thirty strokes are given.

present, excepting only those whose wives are pregnant. Should one of the latter be punished, his wife would suffer a miscarriage. The avowed purpose of this whipping is "to make all the people feel as sorry as the relatives of the dead man."

Burial in most of the valley towns is beneath the house, "as it is much easier to defend the body against evil spirits, and the grave is also protected against the rain." In Manabo and many mountain villages, however, burial is in the yard. It is customary to open a grave already occupied by several of the relatives of the deceased.

Toward noon of the last day, some of the men begin clearing away the bamboo, which protects the old burial, and to remove the dirt.

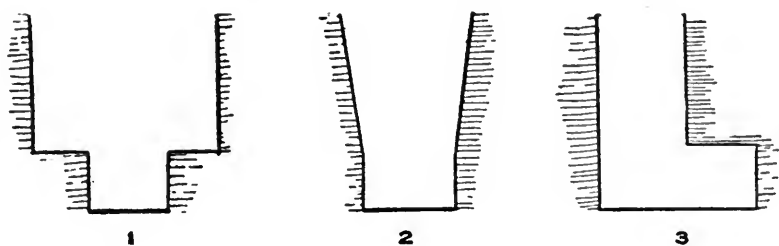


FIG. 3.
CROSS SECTIONS SHOWING TYPES OF GRAVES.

The grave is generally of one of the forms indicated in Fig. 3, and when a depth of about three feet has been reached, the workers encounter stone slabs which protect a lower chamber.¹ When these are reached, the diggers make an opening and thrusting in burning pine-sticks, they call to the dead within, "You must light your pipes with these." As soon as the slabs are raised, the oldest female relative of the deceased goes into the grave, gathers up the bones of the last person interred, ties them into a bundle, and reburies them in one corner. There is at present no such type of burial chamber, as is described by LA GIRONIÈRE,² nor is there a memory or tradition of such an arrangement. As his visit took place less than a century ago, it is unlikely that all trace of it would have been lost. The heavy rainfall in this district would make the construction and maintenance of such

¹ In Manabo a rectangular hole is dug to about five feet, then at right angles to this a chamber is cut to receive the body. This is cut off from the main grave by a stone. A similar type of grave is found in Sumatra (MARSDEN, *History of Sumatra*, 3d ed., p. 287, London, 1811).

² According to this author, the Tinguian put the dried remains of their dead in subterranean tombs or galleries, six or seven yards in depth, the entrance being covered with a sort of trap door (LA GIRONIÈRE, *Twenty Years in the Philippines*, p. 115, London, 1853).

a chamber almost impossible, while the dread of leaving the corpses thus exposed to hostile spirits and the raids of enemies in search of heads would also argue against such a practice. His description of the mummifying or drying of the corpse by means of fires built around it¹ is likewise denied by the old men of Manabo, who insist that they never had such a custom. It certainly does not exist to-day. In a culture, in which the influence of custom is as strong as it is here, it would seem that the care of the corpse, which is intimately related to the condition of the spirit in its final abode, would be one of the last things to change, while the proceedings following a death are to-day so uniform throughout the Tinguian belt, that they argue for a considerable antiquity.

When the grave is ready, the fact is announced in the dwelling, and is the signal for renewed lamentation. The wife and near relatives throw themselves on the corpse, caressing it and crying wildly. Whatever there may have been of duty or respect in the wailing of the first two days, this parting burst of sorrow is genuine. Tears stand in the eyes of many, while others cease their wailing and sob convulsively. After a time an old woman brings in some *oldot* seeds, each strung on a thread, and fastens one on the wrist of each person, as a protection against the evil spirit Akop, who, having been defeated in his designs against the widow, may seek to vent his anger on others.

When this has been done, a medium seats herself in front of the body; and, covering her face with her hands, begins to chant and wail, bidding the spirit to enter her body. Suddenly she falls back in a faint, while suppressed excitement is manifested by all the onlookers. After a moment or two, fire and water are placed at her head and feet, "in order to frighten the spirit away," and then the medium gives the last message of the dead man to his family. This is, except for very rare exceptions, the only time that the spirits of the deceased communicate with mortals; and it is, so far as the writer has been able to learn, the only occasion when the medium repeats messages given to her. At other times she is possessed by natural spirits,² who then talk directly with mortals.

As a last preparation for the grave, a small hole is burned in each garment worn by the dead person, for otherwise the spirit *Ībwa* will envy him his clothing and attempt to steal them. The corpse is then

¹ *Op. cit.*, p. 121.

² As distinguished from those of the dead.

wrapped in a mat, and is carried from the house.¹ The bearers go directly to the *balaua*,² and rest the body in it for a moment. Unless this is done, the spirit will be poor in its future life and unable to build *balaua*.

The body is deposited full length in the grave, the stone slabs are relaid, the chinks between them filled in with damp clay, and the grave is refilled.³ As the last earth is pushed in, a small pig is killed, and its blood is sprinkled on the loose soil. Meanwhile *Selday* is besought to respect the grave and leave it untouched. The animal is cut up, and a small piece is given to each guest, who will stop on the way to his home, and place the meat on the ground as an offering, meanwhile repeating a *dīam*. Should he fail to do this, sickness or death is certain to visit his home or village.

As a further protection against evilly disposed spirits, especially *Ībwa*, an iron plough-point is placed over the grave, "for most evil spirits fear iron;" and during this night and the nine succeeding, a fire is kept burning at the grave and at the foot of the house-ladder.⁴

That night the men spend about an hour in the house of mourning, singing *sang-sangit*, a song in which they praise the dead man, encourage the widow, and bespeak the welfare of the family. The wailers still remain in the dwelling to protect the widow, and a male relative is detailed to see that the fire at the foot of the ladder is kept burning brightly.

Early the next morning, the widow, closely guarded by the wailers, goes to the river, throws her headband into the water, and then goes in herself. As she sinks in the water, an old man throws a bundle of burning rice-straw on her. "The water will wash away some of the sorrow, and the fire will make her thoughts clear." Upon her return to the village, the grave is enclosed with a bamboo fence, and above it is hung a shallow box-like frame, known as *patay*, in which are placed the articles needed by the spirit.⁵ Within the house the mat and pillow

¹ Several times the writer has seen friends place money inside the mat, "so that the spirit may have something to spend."

² The large spirit house, built only by well-to-do families having the hereditary right.

³ In the folk tales a very different method of disposing of the dead is indicated (Traditions of the Tinguian, this volume, No. 1, pp. 23-24, and note).

⁴ Among the Tuaran Dusun of British North Borneo, a fire is built near the mat on which the corpse lies, to protect the body from evil spirits, who are feared as body snatchers (EVANS, *Jour. Ant. Inst.*, Vol. XLVII, 1917, p. 159).

⁵ These consist of dishes, food, tobacco, fire-making outfit, weapons, clothing, and the like.

of the dead are laid ready for use, and at meal time food is placed beside it. The length of time that the mat is left spread out differs somewhat between towns and families. In some cases it is taken up at the end of the period of taboo, while in others it is not rolled up; nor are the windows of the house opened until after the celebration of the *Layog* ceremony, a year later.

The taboo is usually strictly observed through ten days; but should there be some urgent reason, such as planting or reaping, it may be raised somewhat earlier. It is concluded by the blood and oil ceremony. The *lakay*, the other old men of the settlement, and all the relatives, gather in the house of mourning, while the mediums prepare for the ceremony. They kill a small pig and collect its blood in a dish; in another receptacle they place oil. A brush has been made out of a variety of leaves, and this the medium dips into the blood and oil, then draws it over the wrists or ankles of each person present, meanwhile saying, "Let the *lew-lew* (*Fiscus hauili* Blanco) leaves take the sickness and death to another town; let the *kawayan* ("bamboo") make them grow fast and be strong as it is, and have many branches; let the *atilwag* (*Breynia acuminata* Nuell. Arg.) turn the sickness to other towns." A little oil is rubbed on the head of each person present; and all, except the widow, are then freed from restrictions. She must still refrain from wearing her beads, ornaments, or good clothing; and she is barred from taking part in any merry-making until after the *Layog* ceremony.¹

At the conclusion of the anointing, the old men discuss the disposal of the property and other matters of importance in connection with the death.

THE LAYOG.²—Several months after the burial (generally after the lapse of a year), the friends and relatives are summoned in the *Layog*,—a ceremony held with the avowed intention "to show respect for the dead and to cause the family to forget their sorrow." Friends come

¹ In Ilocos Sur a ceremony which lifts the ban off the relatives is held about five days after the funeral. Three months later, the blood and oil are applied to the spouse, who is then released from all restrictions. In San Juan and Lakub, a ceremony known as *Kilyas* is held five days after the funeral. The anointing is done as described above, and then the medium drops a ball of rice under the house, saying, "Go away sickness and death, do not come to our relatives." When she has finished, drums are brought out, all the relatives dance and "forget the sorrow," and are then released from all taboos. The *Layog* is celebrated as in the valley towns.

² Also known as *Waxi* in San Juan, and *Bagoñgon* in Sallapadin. In the latter village, as well as in Manabo and Ba-ak, this ceremony occurs a few days after the funeral.

from near and far; and rice, pigs, cows or carabaos are prepared for food, while *basi* flows freely. It is said that the liquor served at this time is "like tears for the dead." A medium goes to the guardian stones of the village, and there offers rice mixed with blood; she oils the stones, places new yellow headbands on each one, and after dancing *tadek*, returns to the gathering. Often she is accompanied by a number of men, who shout on their return trip "to frighten away evil spirits."

Near the house a chair is made ready for the deceased, and in it are placed clothing and food. In the yard four crossed spears form the frame-work on which a shield rests (Plate XVIII)¹ and on this are beads, food, and garments—offerings for the spirits; while near the house ladder is the spirits' table made of inverted rice mortars.

The duration of this ceremony depends largely on the wealth of the family, for the relatives must furnish everything needed at this time. Games are played, and there is much drinking and singing; but before the members of the family may take part, they are dressed in good garments, and the blood and oil ceremony is repeated on them. At the conclusion of the dancing, they go into the house, roll up the mat used by the dead, open the doors and windows, and all are again free to do as they wish. Should they fail to roll up the mat at this time, it must remain until another *Layog* is held; and during the interval all the former restrictions are in force.²

About twenty years ago, a great number of people in Patok died of cholera; and since then the people of that village have held a *Layog* in their honor each November, to the expense of which all contribute. As this is just before the rice-harvest, a time when all the people wear their best garments, it is customary for the old men to allow bereaved families to participate in this ceremony and then release them from mourning.

BELIEFS CONCERNING THE SPIRIT OF THE DEAD.—Direct questioning brings out some differences of opinion, in the various districts, concerning the spirit of the dead. In Manabo, a town influenced both by the Igorot of the Upit River valley and the Christianized Ilocano of San Jose, the spirit is said to go at once to the great spirit Kadaklan,

¹ This is known as *Apapayag* or *Inapapayag* (p. 309).

² The foregoing ceremonies follow the death of any adult, male or female, but not of newborn children. If the first-born dies in infancy, it is buried in the middle of the night when no one can see the corpse, otherwise other babies will die. The parents don old garments, and are barred from leaving the town or engaging in pastimes, until the ten-day period has passed. No fire is built at the grave, nor are offerings placed over it. When some one else is holding a *Layog*, the parents may join them "to relieve their sorrow and show respect for the dead."

and then to continue on "to the town where it lives." "It is like a person, but is so light that it can be carried along by the wind when it blows."¹ The people of Ba-ay, a mountain village partially made up of immigrants from the eastern side of the Cordillera Central, claim that the spirits of the dead go to a mountain called Singet, where they have a great town. Here, it is also stated, the good are rewarded with fine houses, while the bad have to be content with hovels. The general belief, however, is that the spirit (*kalading*) has a body like that of the living person, but is usually invisible, although spirits have appeared, and have even sought to injure living beings. Immediately following death, the spirit stays near to its old home, ready to take vengeance on any relative, who fails to show his body proper respect. After the blood and oil ceremony, he goes to his future home, Maglawa, carrying with him gifts for the ancestors, which the people have placed about his corpse. In Maglawa he finds conditions much the same as on earth; people are rich and poor; they need houses; they plant and reap; and they conduct ceremonies for the superior beings, just as they had done during their life on earth. Beyond this, the people do not pretend to be posted, "for Kabonīyan did not tell." With the exception of the people of Ba-ay and a few individuals influenced by Christianity, the Tinguian has no idea of reward or punishment in the future life, but he does believe that the position of the spirit in its new home can be affected by the acts of the living (cf. p. 289). No trace of a belief in re-incarnation was found in any district inhabited by this tribe.

LIFE AND DEATH.—The foregoing details concerning birth, childhood, sickness, and death, seem to give us an insight into the Tinguian conception of life and death. For him life and death do not appear to be but incidents in an endless cycle of birth, death, and re-incarnation *ad infinitum*, such as pictured by LÉVY-BRUHL;² yet, in many instances, his acts and beliefs fit in closely with the theory outlined by that author. In this society, there is only a weak line of demarcation between the living and the dead, and the dead for a time at least participate more or less in the life of the living. This is equally true of the unborn child, whose future condition, physical and mental, may be largely moulded by the acts of others. According to LÉVY-BRUHL, this would indicate that the child at delivery is not fully born, is not as yet a member of the

¹ A folk-tale recorded in this town gives quite a different idea of the abode of the spirits (Traditions of the Tinguian, this volume, No. 1, p. 185; also p. 28, note 2).

² Fonctions mentales dans les sociétés inférieures (Paris, 1910).

group; and the succeeding ceremonies are necessary to its full participation in life. Death is likewise of long duration. Following the last breath, the spirit remains near by until the magic power of the funeral severs, to an extent, his participation with society. The purpose of the final ceremony is to complete the rupture between the living and the dead.

To the writer, the facts of Tinguian life and beliefs suggest a somewhat different explanation. We have seen how strong individuals may be affected by magical practices. The close connection between an individual, his garments, or even his name, must be considered to apply with quite as much force to the helpless infant and the afterbirth. So strong is this bond, that even unintentional acts may injure the babe. Evil spirits are always near; and, unless great precautions are taken, they will injure adults if they can get them at a disadvantage, particularly when they are asleep. The child is not able to protect itself from these beings; therefore the adults perform such acts, as they think will secure the good will and help of friendly spirits, while they bribe or buy up those who might otherwise be hostile; and lastly they make use of such magical objects and ceremonies, as will compel the evil spirits to leave the infant alone. As the child grows in size and strength, he is less in need of protection; and at an early age he is treated like the other younger members of the community. Naming follows almost immediately after birth, while puberty and initiation ceremonies are entirely lacking. Apparently then, a child is considered as being fully alive at birth, and at no time does he undergo any rites or ceremonies which make him more a part of the community than he was on the first day he saw the light.

When death occurs, the spirit remains near to the corpse until after the funeral, and even then is close by until the ten days of taboo are over. He still finds need of nourishment, and hence food is placed near to his mat. As at birth, he is not in a position to protect his body from the designs of evil spirits, and if his relatives fail to give the corpse proper care, it is certain to be mutilated; likewise certain acts of the living towards the corpse can affect the position of the spirit in Maglawa. Hence it is of supreme importance that the former owner guards against any possible neglect or injury to the body, and it seems plausible that the presence of the spirit near its old haunts may be for the purpose of seeing that its body is carefully attended to. The folktales tell of several instances, in which the spirits took vengeance on relatives who neglected their bodies, or violated the period of taboo.¹

¹ See Traditions of the Tinguian, this volume, No. 1, pp. 180-182.

When the danger period is past, the spirit at once leaves its old home, and returns again only at the time of the *Layog*. From that time on, he continues his existence in the upper world, neither troubling, nor being troubled by mortals on earth.¹ Ancestor worship does not occur here, nor are offerings made to the dead, other than those described above.

¹For a full discussion of this subject, see COLE, Relations between the Living and the Dead (*Am. Jour. of Sociology*, Vol. XXI, No. 5, 1916, pp. 610, *et seq.*).

IV. RELIGION AND MAGIC

The Tinguian has been taught by his elders that he is surrounded by a great body of spirits, some good, some malevolent. The folk-tales handed down from ancient times add their authority to the teachings of older generations, while the individual himself has seen the bodies of the mediums possessed by the superior beings; he has communicated with them direct, has seen them cure the sick and predict coming events. At many a funeral, he has seen the medium squat before the corpse, chanting a weird song, and then suddenly become possessed by the spirit of the deceased; and, finally, he or some of his friends or townspeople are confident that they have seen and talked to ghosts of the recently departed. All these beings are real to him; he is so certain of their existence that he seldom speculates about them or their acts.

Some of these spirits are always near; and a part of them, at least, take more than an ordinary interest in human affairs. Thanks to the teachings of the elders, the Tinguian knows how to propitiate them; and, if necessary, he may even compel friendly action on the part of many. Toward the less powerful of the evilly disposed beings, he shows indifference or insolence; he may make fun of, or lie to, and cheat them during the day, but he is careful to guard himself at night against their machinations. To the more powerful he shows the utmost respect; he offers them gifts of food, drink, and material objects; and conducts ceremonies in the manner demanded by them. Having done these things, he feels that he is a party to a bargain; and the spirits must, on their part, repay by granting the benefits desired. Not entirely content with these precautions, he performs certain magical acts which prevent evil spirits from doing harm to an individual or a community, and by the same means he is able to control storms, the rise of streams, and the growth of crops. It is doubtful if the Tinguian has ever speculated in regard to this magical force, yet he clearly separates it from the power resident in the spirit world. It appears to be a great undifferentiated force to which spirits, nature, and men are subject alike.

If a troublesome question arises, or an evident inconsistency in his beliefs is called to his attention, he disposes of it by the simple statement that it is *kadauyan* ("custom"), "was taught by the ancestors," and hence is not subject to question.

His religion holds forth no threat of punishment in a future world, neither are there rewards in that existence to urge men to better deeds. The chief teaching is that the customs of ancient times must be faithfully followed; to change is to show disrespect for the dead, for the spirits who are responsible for the customs, which are synonymous with law.

Custom and religion have become so closely interwoven in this society that it is well-nigh impossible to separate them. The building of a house, the planting, harvesting and care of the rice, the procedure at a birth, wedding, or funeral, in short, all the events of the social and economic life, are so governed by custom and religious beliefs, that it is safe to say that nearly every act in the life of the Tinguian is directed or affected by these forces.

Two classes of spirits are recognized; first, those who have existed through all time, whom we shall call natural spirits; second, the spirits of deceased mortals. The latter reside forever in Maglawa, a place midway between earth and sky; but a small number of them have joined the company of the natural spirits. Except for these few, they are not worshiped, and no offerings are made to them, after the period of mourning is past. The members of the first class cover a wide range, from Kadaklan, the great spirit who resides above, to Kabonīyan, the teacher and helper, to those resident in the guardian stones, to the half human, half bird-like *alan*, to the low, mean spirits who delight to annoy mortals. These beings are usually invisible, but at times of ceremonies they enter the bodies of the mediums, possess them, and thus communicate with the people. On rare occasions they are visible in their own forms, as when Kabonīyan appeared as the antagonist and later as the friend of Sayen.¹

These beings are addressed, first through certain semi-magical formulas, known as *dīams*. These are seldom prayers or supplications, but are a part of a definite ritual, the whole of which is expected to gain definite favors.

At the beginning, and during the course of all ceremonies, animals are killed. A part of the flesh and the blood is mixed with rice, and is offered to the spirits; but the bulk of the offering is eaten by the participants. Liquor is consumed in great quantities at such a time, but a small amount is always poured out for the use of the superior beings. Finally, the mediums summon the spirits into their bodies; and, when possessed, they are no longer considered as persons, but are the spirits

¹ See Traditions of the Tinguian, this volume, No. 1, p. 185.

themselves. The beings who appear in this way talk directly with the people; they offer advice, give information concerning affairs in the spirit world, and oftentimes they mingle with the people on equal terms, joining in their dances and taking a lively interest in their daily affairs.

The people seldom pray to or supplicate the invisible spirits; but when they are present in the bodies of the mediums, they make requests, and ask advice, as they would from any friend or acquaintance. With many, the Tinguian is on amicable terms, while toward Kabonīyan he exhibits a degree of respect and gratitude which is close to affection. He realizes that there are many unfriendly spirits, but he has means of controlling or thwarting their evil designs; and hence he does not live in that state of perpetual fear which is so often pictured as the condition of the savage.

THE SPIRITS.—A great host of unnamed spirits are known to exist; they often attend the ceremonies and sometimes enter the bodies of the mediums, and in this way new figures appear from time to time. In addition to these, there are certain superior beings who are well known, and who, as already indicated, exercise a potent influence on the daily life of the people. The following list will serve to give some idea of these spirits and their attributes; while the names of the less important will be found in connection with the detailed description of the ceremonies.

Kadaklan ("the greatest"), a powerful male spirit, who lives in the sky, created the earth, sun, moon, and stars. The stars are only stones, but the sun and moon are lights. At times Kadaklan enters the body of a favored medium, and talks directly with the people; but more frequently he takes other means of communication. Oftentimes he sends his dog Kimat, the lightning, to bite a tree or strike a field or house, and in this way makes known his wish that the owner celebrate the *Padiam* ceremony (cf. p. 401). All other beings are in a measure subservient to him, and his wishes are frequently made known through them. Thunder is his drum with which he amuses himself during stormy weather, but sometimes he plays on it even on clear days.

Agemem is the wife of Kadaklan. She lives in the ground. Little is known of her except that she has given birth to two sons,¹ whose chief duty is to see that the commands of their father are obeyed.

Adám and Baliyen are the sons of Kadaklan. The name of the

¹In Manabo it is said that there are five sons, who reside in the spirit houses known as *tangpap*, *alalot*, and *pangkew*.

first boy is suggestive of Christian influence, but there are no traditions or further details to link him with the Biblical character.

Kabonīyan is the friend and helper of the people, and by many is classed above or identified with Kadaklan. At times he lives in the sky; again in a great cave near Patok.¹ From this cave came the jars which could talk and move, here were found the copper gongs used in the dances, and here too grew the wonderful tree which bore the agate beads so prized by the women. This spirit gave the Tinguian rice and sugar-cane, taught them how to plant and reap, how to foil the designs of ill-disposed spirits, the words of the *dīams* and the details of many ceremonies. Further to bind himself to the people, it is said, he married "in the first times" a woman from Manabo. He is summoned in nearly every ceremony, and there are several accounts of his having appeared in his own form. According to one of these, he is of immense proportions; his spear is as large as a tree, and his head-axe the size of the end of the house.²

Apdel is the spirit who resides in the guardian stones (*pīnaing*) at the gate of the town. During a ceremony, or when the men are away for a fight, it becomes his special duty to protect the village from sickness and enemies. He has been known to appear as a red rooster or as a white dog.

Īdadaya, who lives in the east (*daya*); is a powerful spirit who attends the *Pala-an* ceremony. He rides a horse, which he ties to the little structure built during the rite. Ten grand-children reside with him, and they all wear in their hair the *īgam* (notched feathers attached to a stick). When these feathers lose their lustre, they can only be restored by the celebration of *Pala-an* (cf. p. 328). Hence the owners cause some mortal, who has the right to conduct the ceremony, to become ill, and then inform him through the mediums as to the cause of his affliction. The names of the grand-children are as follows: Pensipenondosan, Logosen, Bakoden, Bing-gasan, Bakdañgan, Giligen, Idomalo, Agkabkabayo, Ebloyan, and Agtabtabokal.

Kaiba-an is the spirit who lives in the little house or *saloko* in the rice-fields, and who protects the growing crops. Offerings are made to him, when a new field is constructed, when the rice is transplanted, and at harvest time. "The ground which grows" (that is the nest of the white ant) is said to be made by him.

¹The people of Manabo say, he resides in the spirit-structures known as *balaua*, *sogayab*, *batog*, and *balag* (cf. pp. 308, *et seq.*)

²Among the Ifugao, Kabúnian is the lowest of the three layers which make up the heavens (BEYER, *Origin Myths among the Mountain Peoples of the Philippines*, *Phil. Jour. of Science*, Vol. viii, No. 2, 1913, p. 99).

Makaboteng, also called Sanadan, is the guardian of the deer and wild hogs. His good will is necessary if the dogs are to be successful in the chase; consequently he is summoned to many ceremonies, where he receives the most courteous treatment. In one ceremony he declared, "I can become the sunset sky."

Sabian or Isabian is the guardian of the dogs.

Bisangolan ("the place of opening or tearing") is a gigantic spirit, who lives near the river, and who in time of floods uses his head-axe and walking-stick to keep the logs and refuse from jamming. "He is very old, like the world, and he pulls out his beard with his finger nails and his knife. His seat is a wooden plate." He appears in the *Dawak*, *Tangpap*, and *Sayang* ceremonies, holding a rooster and a bundle of rice. In Ba-ak he is called Ibalinsogóan, and is the first spirit summoned in *Dawak*.

Kakalonan, also known as Boboyonan, is the one who makes friends, and who learns the source of troubles. When summoned at the beginning of a ceremony, he tells what needs to be done, in order to insure the results desired.

Sasanganen, sometimes called Ingalit, are spirits whose business it is to take heads and put them on the *saga* or in the *saloko* (cf. p. 310). Headache is caused by them.

Abat are numerous spirits who cause sore feet and headache. *Salono* and *barwi* are built for them (cf. pp. 309-310). The spirits of *Ibal*, who live in Daem, are responsible for most sickness among children, but they are easily appeased with blood and rice. The *Ibal* ceremony is held for them.

Maganawan, who lives in Nagbotobotan ("the place near which the rivers empty into the hole, where all streams go") is one of the spirits, called in the *Sangásang* ceremony, and for whom the blood of the rooster mixed with rice is put into the *saloko*, which stands in the yard.

Ináwen is a pregnant female spirit, who lives in the sea, and who demands the blood of a chicken mixed with rice to satisfy her capricious appetite. She also attends the *Sangásang*.

Kideng is a tall, fat spirit with nine heads. He is the servant of Ináwen, and carries the gifts of mortals to his mistress.

Ibwa is an evil spirit, who once mingled with the people in human form. Due to the thoughtless act of a mourner at a funeral, he became so addicted to the taste of human flesh, that it has since then been necessary to protect the corpse from him. He fears iron, and hence a piece of that metal is always laid on the grave. Holes are burned

in each garment placed on the body to keep him from stealing them.

Akop is likewise evil. He has a head, long slimy arms and legs, but no body. He always frequents the place of death, and seeks to embrace the spouse of the deceased. Should he succeed, death follows quickly. To defeat his plans, the widow is closely guarded by the wailers; she also sleeps under a fish net as an additional protection against his long fingers, and she wears seeds which are disliked by this being.

Kadongáyan indulges in the malicious sport of slitting the mouth of the corpse back to the ears. In order to frighten him away, a live chicken, with its mouth split to its throat, is placed by the door, during the time the body is in the house. When he sees the sufferings of the bird, he fears to enter the dwelling lest the people treat him in the same manner.

Selday is an ill-disposed being. He causes people to have sore feet, and only relieves them, when offerings are made to him in the *saloko* or *barwi*. He lives in the wooded hill, but quickly learns of a death, and appears at the open grave. Unless he is bought off with an offering, the blood of a small pig, he is almost certain to make away with the body, or cause a great sickness to visit the village. As the mourners return home, after the burial, they place bits of the slaughtered animal by the trail, so that he will not make them ill.

Bayon is a male spirit, who dwells in the sky, and who comes to earth as a fresh breeze. He once stole a girl from Layógan, changed her two breasts into one, placed this in the center of her chest, and married her.

Lokadáya is the human wife of Bayon. She now appears to have joined the company of the natural spirits and to be immortal. At times, both she and her husband enter the bodies of the mediums.

Agonán is the spirit who knows many dialects. He lives in Dingolowan.

Gilen attends many ceremonies, and occupies an important place in *Tangpap*; yet little is known of him.

Inginlaod are spirits who live in the west.

Ginobáyan is a female spirit, always present in the *Tangpap* ceremony.

Sangalo is a spirit who gives good and bad signs.

Dapeg, Balingen-ngen, Benisalsal, and Kikiba-an, are all disturbers and mischief-makers. They cause illness, sore feet, headache, and bad dreams. They are important only because of the frequency with which they appear.

Al-lot attends festivals and prevents quarrels.

Liblibayan, Banbanayo, and Banbantay, are lesser spirits, who formerly aided "the people of the first times."

The term "Alan" comprises a large body of spirits with half human, half bird-like forms. They have wings and can fly; their toes are at the back of their feet, and their fingers attach to the wrists and point backward. Often they hang from the branches of trees, like bats, but they are also pictured as having fine houses and great riches. They are sometimes hostile or mischievous, but more frequently are friendly. They play a very important part in the mythology, but not in the cult.¹

Komau is a giant spirit, who, according to tradition, was killed by the hero Sayen. Among the Ilocano and some of the Tinguian, the Komau is known as a great invisible bird, which steals people and their possessions. He does not visit the people through the bodies of the mediums.

Anito is a general term used to designate members of the spirit world.

A survey of the foregoing list brings out a noticeable lack of nature-spirits; of trees, rocks, and natural formations considered as animate; and of guardian spirits of families and industries. There is a strong suggestion, however, in the folk-tales to the effect that this has not always been the case; and even to-day there are some conflicts regarding the status of certain spirits. In the village of Manabo, thunder is known as Kidol; in Likuan and Bakaok, as Kido-ol; and in each place he is recognized as a powerful spirit. In Ba-ay, two types of lightning are known to be spirits. The flash from the sky is Salit, that "from the ground" is Kilawit. Here thunder is Kadaklan, but the sun is the all powerful being. He is male, and is "so powerful that he does not need or desire ceremonies or houses." The moon is likewise a powerful spirit, but female.

In the discussion of the tales² it was suggested that these and other ideas, which differ from those held by the majority of the tribe, may represent older conceptions, which have been swamped, or may have been introduced into Abra by emigrants from the north and east.

THE MEDIUMS.—The superior beings talk with mortals through the aid of mediums, known individually and collectively as *alopogan* ("she who covers her face").³ These are generally women past middle life, though men are not barred from the profession, who, when

¹ Traditions of the Tinguian, this volume, No. 1, p. 15.

² Traditions of the Tinguian, this volume, No. 1, p. 32.

³ The medium is also sometimes called *manganito*.

chosen, are made aware of the fact by having trembling fits when they are not cold, by warnings in dreams, or by being informed by other mediums that they are desired by the spirits. A woman may live the greater part of her life without any idea of becoming a medium, and then because of such a notification will undertake to qualify. She goes to one already versed, and from her learns the details of the various ceremonies, the gifts suitable for each spirit, and the chants or *dīams* which must be used at certain times. This is a considerable task, for the *dīams* must be learned word for word; and, likewise, each ceremony must be conducted, just as it was taught by the spirits to the "people of the first times." The training occupies several months; and when all is ready, the candidate secures her *pīling*. This is a collection of large sea-shells attached to cords, which is kept in a small basket together with a Chinese plate and a hundred fathoms of thread (Plate XIX). New shells may be used, but it is preferable to secure, if possible, the *pīling* of a dead medium. Being thus supplied, the novice seeks the approval of the spirits and acceptance as a medium. The wishes of the higher beings are learned by means of a ceremony, in the course of which a pig is killed, and its blood mixed with rice is scattered on the ground. The liver of the animal is eagerly examined; for, if certain marks appear on it, the candidate is rejected, or must continue her period of probation for several months, before another trial can be made. During this time she may aid in ceremonies, but she is not possessed by the spirits. When finally accepted, she may begin to summon the spirits into her body. She places offerings on a mat, seats herself in front of them, and calls the attention of the spirits by striking her *pīling*, or a bit of lead, against a plate; then covering her face with her hands, she begins to chant. Suddenly she is possessed; and then, no longer as a human, but as the spirit itself, she talks with the people, asking and answering questions, or giving directions, as to what shall be done to avert sickness and trouble, or to bring good fortune.

Certain mediums are visited only by low, mean spirits; others, by both good and bad; while still others may be possessed even by Kadaklan, the greatest of all. It is customary for the spirit of a deceased mortal to enter the body of a medium, just before the corpse is to be buried, to give messages to the family; but he seldom comes again in this manner.

The pay of a medium is small, usually a portion of a sacrificed animal, a few bundles of rice, and some beads; but this payment is more than offset by the restrictions placed on her. At no time may

she eat of carabao, wild pig, wild chicken, or shrimp; nor may she touch peppers—all prized articles of food.

The inducements for a person to enter this vocation are so few that a candidate begins her training with reluctance; but, once accepted by the spirits, the medium yields herself fully and sincerely to their wishes. When possessed by a spirit, her own personality is submerged, and she does many things of which she is apparently ignorant, when she emerges from the spell. Oftentimes, as she squats by the mat, summoning the spirits, her eyes take on a far-away stare; the veins of her face and neck stand out prominently, while the muscles of her arms and legs are tense; then, as she is possessed, she assumes the character and habits of the superior being. If it is a spirit supposed to dwell in Igorot or Kalinga land, she speaks in a dialect unfamiliar to her hearers, orders them to dance in Igorot fashion, and then instructs them in dances, which she or her townspeople could never have seen.¹ At times she carries on sleight-of-hand tricks, as when she places beads in a dish of oil, and dances with it high above her head, until the beads vanish. A day or two later she will recover them from the hair of some participant in the ceremony. Most of her acts are in accordance with a set procedure; yet at times she goes further, and does things which seem quite inexplicable.

One evening, in the village of Manabo, we were attending a ceremony. Spirit after spirit had appeared, and at their order dances and other acts had taken place. About ten o'clock a brilliant flash of lightning occurred, although it was not a stormy evening. The body of the medium was at that time possessed by Amangau, a head-hunting spirit. He at once stopped his dance, and announced that he had just taken the head of a boy from Luluno, and that the people of his village were even then dancing about the skull. Earlier in the evening we had noticed this lad (evidently a consumptive) among the spectators. When the spirit made this claim, we looked for him, but he had vanished. A little later we learned that he had died of a hemorrhage at about the time of the flash.

¹Similar mediums and possession were observed among the ancient Visayans. See BLAIR and ROBERTSON, *The Philippine Islands*, Vol. V, p. 133; PEREZ writing concerning Zambales says of their mediums, "He commences to shiver, his whole body trembling, and making many faces by means of his eyes; he generally talks, sometimes between his teeth, without any one understanding him. Sometimes he contents himself with wry faces which he makes with his eyes and the trembling of all his body. After a few moments he strikes himself on the knee, and says he is the *anito* to whom the sacrifice is being made. See BLAIR and ROBERTSON, *op. cit.*, Vol. XLVII, p. 301.

Such occurrences make a deep impression on the mind of the people, and strengthen their belief in the spirit world; but, so far as could be observed, the prestige of the medium was in nowise enhanced.

Since most of the ceremonies are held to keep the family or individual in good health, the medium takes the place of a physician. She often makes use of simple herbs and medicinal plants, but always with the idea that the treatment is distasteful to the being, who has caused the trouble, and not with any idea of its curative properties. Since magic and religion are practically the same in this society, the medium is the one who usually conducts or orders the magic rites; and for the same reason she, better than all others, can read the signs and omens sent by members of the spirit world.

MAGIC AND OMENS.—The folk-tales are filled with accounts of magical acts, performed by "the people of the first times." They annihilated time and space, commanded inanimate objects to do their will, created human beings from pieces of betel-nut, and caused the magical increase of food and drink. Those days have passed, yet magical acts still pervade all the ceremonies; nature is overcome, while the power to work evil by other than human means is a recognized fact of daily life. In the detailed accounts of the ceremonies will be found many examples of these magical acts, but the few here mentioned will give a good idea of all.

In one ceremony, a blanket is placed over the family, and on their heads a coconut is cut in two, and the halves are allowed to fall; for, "as they drop to the ground, so does sickness and evil fall away from the people." A bound pig is placed in the center of the floor, and water is poured into its ear that, "as it shakes out the water, so may evil spirits and sickness be thrown out of the place." At one point in the *Tangpap* ceremony, a boy takes the sacrificial blood and rice from a large dish, and puts it in a number of smaller ones, then returns it again to the first; for, "when the spirits make a man sick, they take a part of his life. When they make him well, they put it back, just as the boy takes away a part of the food, gives it to the spirits, and then replaces it." The same idea appears in the dance which follows. The boy and the medium take hold of a winnower, raise it in the air, and dance half way around a rice-mortar; then return, as they came, and replace it, "just as the spirits took away a part of the patient's life, but now will put it back."

The whole life of a child can be determined, or at least largely influenced, by the treatment given the afterbirth, while the use of

bamboo and other prolific plants, at this time and at a wedding, promote growth and fertility.

A piece of charcoal attached to a certain type of notched stick is placed in the rice-seed beds, and thus the new leaves are compelled to turn the dark green color of sturdy plants.

If a river is overflowing its banks, it can be controlled by cutting off a pig's head and throwing it into the waters. An even more certain method is to have a woman, who was born on the other side of the river, take her weaving baton and plant it on the bank. The water will not rise past this barrier.

Blackening of the teeth is a semi-magical procedure. A mixture of tan-bark and iron salts is twice applied to the teeth, and is allowed to remain several hours; but, in order to obtain the desired result, it is necessary to use the mixture after nightfall and to remove it, before the cocks begin to crow, in the morning. If the fowls are heard, while the teeth are being treated, they will remain white; likewise they will refuse to take the color, should their owner approach a corpse or grave.

On well-travelled trails one often sees, at the tops of high hills, piles of stones, which have been built up during many years. As he ascends a steep slope, each traveller picks up a small stone, and carries it to the top, where he places it on the pile. As he does so, he leaves his weariness behind him, and continues his journey fresh and strong.

The use of love-charms is widespread: certain roots and leaves, when oiled or dampened with saliva, give forth a pleasant odor, which compels the affection of a woman, even in spite of her wishes.¹

Evil magic, known as *gamot* ("poison") is also extensively used. A little dust taken from the footprint of a foe, a bit of clothing, or an article recently handled by him, is placed in a dish of water, and is stirred violently. Soon the victim begins to feel the effect of this treatment, and within a few hours becomes insane. To make him lame, it is only necessary to place poison on articles recently touched by his feet. Death or impotency can be produced by placing poison on his

¹ Among the ancient Tagalog, charms made of herbs, stones, and wood, were used to infuse the heart with love (BLAIR and ROBERTSON, *The Philippine Islands*, Vol VII, p. 194). Similar practices are found in India, among the Selangor of the Malay Peninsula, among the Bagobo of Mindanao and in Japan: see ROY, *Jour. Royal Anth. Inst.*, Vol. XLIV, 1914, p. 337; SKEAT and BLAGDEN, *Pagan Races of the Malay Peninsula*, p. 312; BENEDICT, *Bagobo Ceremonial, Magic and Myth*, p. 220 (*Annals N. Y. Academy of Sciences*, Vol. XXV, 1916); HILDBURGH, *Man*, Nov. 1915, pp. 168, *et seq.*; *Trans. Japan Soc.*, Vol. VIII, pp. 132, *et seq.*

garments. A fly is named after a person, and is placed in a bamboo tube. This is set near the fire, and in a short time the victim of the plot is seized with fever. Likewise magical chants and dances, carried on beneath a house, may bring death to all the people of the dwelling.

A combination of true poisoning and magical practice is also found. To cause consumption or some wasting disease, a snake is killed, and its head cut off; then the body is hung up, and the liquor coming from the decomposing flesh is caught in a shell cup. This fluid is introduced into the victim's food, or some of his belongings are treated with it. If the subject dies, his relatives may get revenge on the poisoner. This is accomplished by taking out the heart of a pig and inserting it in the mouth or stomach of the victim. This must be done under the cover of darkness, and the corpse be buried at once. A high bamboo fence is then built around the grave, so that no one can reach it. The person responsible for the death will fall ill at once, and will die unless he is able to secure one of the victim's garments or dirt from the grave.

The actual introduction of poison in food and drink is thought to be very common. The writer attended one ceremony following which a large number of the guests fell sick. The illness was ascribed to magic poisoning, yet it was evident that the cause was over-indulgence in fresh pork by people, who for months had eaten little if any meat.

OMENS.—The ability to foretell future events by the flight or calls of birds, actions of animals, by the condition of the liver and gall of sacrificed pigs, or by the movements of certain articles under the questioning of a medium, is an undoubted fact in this society.

A small bird known as *labeg*, is the messenger of the spirits, who control the *Bakid* and *Sangásang* ceremonies. When this bird enters the house, it is caught at once, its feathers are oiled; beads are attached to its feet, and it is released with the promise that the ceremony will be celebrated at once. This bird accompanies the warriors, and warns or encourages them with its calls. If it flies across their path from right to left, all is well; but if it comes from the left, they must return home, or trouble will befall the party.

The spirits of *Sangásang* make use of other birds and animals to warn the builders of a house, if the location selected does not please them. All the Tinguian know that the arrival of snakes, big lizards, deer, or wild hogs at the site of a new house is a bad sign.

If a party or an individual is starting on a journey, and the king-

fisher (*salaksak*) flies from in front toward the place just left, it is a command to return at once; else illness in the village or family will compel a later return.¹ Should the *koling* cry *awīt, awīt* ("to carry, to carry"), an immediate return is necessary, or a member of the party will die, and will be carried home. When a snake crawls across the trail, and goes into a hole, it is a certain warning that, unless the trip is given up, some of the party will die, and be buried in the ground.

The falling of a tree across the trail, when the groom is on his way to the home of his bride, threatens death for the couple, while the breaking or falling of an object during the marriage ceremony presages misfortune.

Not all the signs are evil; for, if a man is starting to hunt, or trade, and he sees a hawk fly in front of him and catch a bird or chicken, he may on that day secure all the game he can carry, or can trade on his own terms.

All the foregoing are important, but the most constantly employed method of foretelling the future is to examine the gall and liver of slain pigs. These animals are killed in all great ceremonies, at the conclusion of a medium's probation period, at birth, death, and funeral observances, and for other important events. If a head-hunt is to be attempted, the gall sack is removed, and is carefully examined, for if it is large and full, and the liquor in it is bitter, the enemy will be powerless; but if the sack is small, and only partially filled with a weak liquor, it will fare ill with the warriors who go into battle. For all other events, the liver itself gives the signs. When it is full and smooth, the omens are favorable; but if it is pitted, has black specks on it, is wrinkled, or has cross lines on it, the spirits are ill-disposed, and the project should be delayed. If, however, the matter is very urgent, another pig or a fowl may be offered in the hope that the attitude of the spirits may be changed. If the liver of the new sacrifice is good, the ceremony or raid may continue. The blood of these animals is always mixed with rice, and is scattered about for the superior beings, but the flesh is cooked, and is consumed by the mortals.²

¹ The *salaksak* was also the omen bird of the Zambales (BLAIR and ROBERTSON, Philippine Islands, Vol. XLVII, p. 307).

² Predicting of the future through the flight of birds, or by means of the entrails of slain animals, is widespread, not only in the Philippines and Malaysia generally, but was equally important in ancient Babylonia and Rome. The resemblances are so many that certain writers, namely, HOSE and McDUGALL, KROEBER, and LAUFER are inclined to credit them to common historical influences. See HOSE and McDUGALL, *Pagan Tribes of Borneo*, Vol. II, p. 255 (London, 1912); KROEBER, *Peoples of the Philippines* (*American Museum of Natural History*, Handbook Series, No. 8, p. 192, New York, 1919); LAUFER, *Toung Pao*, 1914, pp. 1-51.

To recover stolen and misplaced articles or animals, one of three methods is employed. The first is to attach a cord to a jar-cover or the shells used by a medium. This is suspended so that it hangs freely, and questions are put to it. If the answer is "yes," it will swing to and fro. The second method is to place a bamboo stick horizontally on the ground and then to stand an egg on it. As the question is asked, the egg is released. If it falls, the answer is in the negative; if it stands, it replies "yes." The third and more common way is to place a head-axe on the ground, then to blow on the end of a spear and put it point down on the blade of the axe. If it balances, the answer is "yes."

CEREMONIAL STRUCTURES AND PARAPHERNALIA.—As has been indicated, the Tinguian holds many ceremonies in honor of the superior beings; and, in connection with these, builds numerous small structures, and employs various paraphernalia, most of which bear definite names, and have well established uses. Since a knowledge of these structures and devices is necessary to a full understanding of the ceremonies, an alphabetical list is here furnished, before proceeding to the detailed discussion of the rites.

ALALOT: Two arches of bamboo, which support a grass roof. A small jar of *basi* stands in this structure for the use of visiting spirits. Is generally constructed during the *Sayang* ceremony, but in Bakaok it is built alone to cure sickness or to change a bad disposition (Plate XX, No. 4).

ALIGANG: A four-pronged fork of a branch in which a jar of *basi* and other offerings are placed for the Igorot spirits of Talegteg (Salegseg). It is placed at the corner of the house during *Sayang*.

ANSISILIT: The framework placed beside the guardian stones on the sixteenth morning of *Sayang*. It closely resembles the *Inapapáyag*.

BALABAGO (known in Manabo as Talagan): A long bamboo bench with a roofing of betel leaves. It is intended as a seat for guests, both spirit and human, during important ceremonies.

BALAG: A seat of wood or bamboo, placed close to the house-ladder during the *Sayang* ceremony. Above and beside it are *alangin* leaves, branches of the *lanoti* tree, sugar-cane, and a leafy branch of bamboo. Here also are found a net equipped with lead sinkers, a top-shaped device, and short sections of bamboo filled with liquor. In some towns this is the seat of the honored guest, who dips *basi* for the dancers. In San Juan this seat is called *Patogaiú*.

BALAU: This, the largest and most important of the spirit struc-

tures, is built during the *Sayang* ceremony. The roofing is of plaited bamboo, covered with cogon grass. This is supported by eight up-rights, which likewise furnish attachment for the bamboo flooring. There are no sides to the building, but it is so sturdily constructed that it lasts through several seasons. Except for the times of ceremony, it is used as a lounging place for the men, or as a loom-room by the women. Quite commonly poles are run lengthwise of the structure, at the lower level of the roof; and this "attic," as well as the space beneath the floor, is used for the storage of farming implements, bundles of rattan and thatching (Plate XXI).

BALITANG: A large seat like the *Balabago*, but with a grass roofing. It is used as a seat for visitors during great ceremonies and festivals. This name is applied, in Manabo, to a little house, built among the bananas for the spirit *Imalbi*.

BANĪ-ĪT or **BUNOT:** Consists of a coconut husk suspended from a pole. The feathers of a rooster are stuck into the sides. It is made as a cure for sick-headache, also for lameness.

BANGBANGSAL: Four long bamboo poles are set in the ground, and are roofed over to make a shelter for the spirits of *Sayaw*, who come in the *Tangpap* ceremony.

BÁTOG: An unhusked coconut, resting on three bamboo sticks, goes by this name. It always appears in the *Sayang* ceremony, close to the *Balag*, but its use and meaning are not clear.

BAWI, also called **BABAWI**, **ABABONG**, and **SINABA-AN:** A name applied to any one of the small houses, built in the fields or gardens as a home for the spirits *Kaiba-an*, *Abat*, *Selday*, and some others of lesser importance (Plate XXII).

IDASAN: A seat or bench which stands near the house-ladder during the *Sayang*. A roof of cogon grass protects ten bundles of unthreshed rice, which lie on it. This rice is later used as seed. In the San Juan district, the place of the *Īdasan* seems to be taken by three bamboo poles, placed in tripod fashion, so as to support a basket of rice. This is known as *Pinalasang*.

INAPAPÁYAG: Two-forked saplings or four reeds are arranged so as to support a shield or a cloth "roof" (Plate XVIII). During *Sayang* and some other ceremonies, it stands in the yard, or near to the town gate; and on it food and drink are placed for visiting spirits. During the celebration of *Layog* (cf. p. 290), it is built near to the dancing space, and contains offerings for the spirit of the dead. A spear with a colored clout is stuck into the ground close by; and usually an in-

verted rice mortar also stands here, and supports a dish of *basi*. In the mountain village of Likuan it is built alone as a cure for sickness. A pig is killed and the mediums summon the spirits as in *Dawak* (cf. p. 316).

KALANG: A wooden box, the sides of which are cut to resemble the head and horns of a carabao. The spirits are not thought to reside here, but do come to partake of the food and drink placed in it. It is attached to the roof of the dwelling or in the *balaua* or *kalangan*. New offerings are placed in the *kalang*, before the men go to fight, or when the *Sayang* ceremony is held. It also holds the head-bands worn by the mediums, when making *Dawak* (Fig. 4, No. 2).

KALANGAN: the place of the *kalang*. This is similar to the *balaua*, but is smaller and, as a rule, has only four supporting timbers (Plate XXIII).

PALA-AN: Four long poles, usually three of bamboo, and one of a resinous tree known as *anteng* (*Canarium villosum* Bl.) are set in a square and support, near the top, a platform of bamboo (Plate XXIV). Offerings are made both on and below the *Pala-an* during the ceremony of that name, and in the more important rites.

PANGKEW: Three bamboo poles are planted in the ground in a triangle, but they lean away from each other at such an angle, as to admit of a small platform midway of their length. A roofing of cogon grass completes the structure. It is built during *Sayang*, and contains a small jar of *basi*. The roof is always adorned with coconut blossoms (Plate XX).

SAGANG: Sharpened bamboo poles about eight feet in length on which the skulls of enemies were formerly exhibited. The pointed end was pushed through the *foramen magnum*, and the pole was then planted near the gate of the town.

SALOKO, also called **SALOKANG** and **SABUT:** This is a bamboo pole about ten feet long, one end of which is split into several strips; these are forced apart, and are interwoven with other strips, thus forming a sort of basket. When such a pole is erected near to a house, or at the gate of the town, it is generally in connection with a ceremony made to cure headache. It is also used in the fields as a dwelling place for the spirit *Kaiba-an* (Plate XXV).

The *Saloko* ceremony and the *dīam*, which accompanies it, seem to indicate that this pole originated in connection with head-hunting; and its presence in the fields gives a hint that in former times a head-hunt may have been a necessary preliminary to the rice-planting.

SOGÁYOB: A covered porch, which is built along one side of the house during the *Sayang* ceremony. In it hang the vines and other articles, used by the female dancers in one part of the rite. A portion of one of the slaughtered pigs is placed here for the spirits of Bangued. In Lumaba the *Sogáyob* is built alone as a part of a one-day ceremony; while in Sallapadan it follows *Kalangan* after an interval of about three months.

TALTALABONG: Following many ceremonies a small bamboo raft with arched covering is constructed. In it offerings are placed for spirits, who have been unable to attend the rite. In Manabo it is said that the raft is intended particularly for the sons of Kadaklan (Plate XXVI).

TANGPAP: Two types of structure appear under this name. When it is built as a part of the *Tangpap* ceremony, it is a small house with a slanting roof resting on four poles. About three feet above the ground, an interwoven bamboo floor is lashed to the uprights (Plate XXVII). In the *Sayang* ceremony, there are two structures which go by this name (Plate XX, Nos. 2 and 3). The larger has two floors, the smaller only one. On each floor is a small pot of *basi*, daubed with white.

TABOO GATEWAY: At the gate of a town, one sometimes finds a defensive wall of bamboo, between the uprights of which are thrust bamboo spears in order to catch evil spirits, while on the gate proper are vines and leaves pleasing to the good spirits. Likewise in the *saloko*, which stands close by, are food and drink or betel-nut. All this generally appears when an epidemic is in a nearby village, in order to frighten the bearers of the sickness away, and at the same time gain the aid of well-disposed spirits. At such a time many of the people wear wristlets and anklets of bamboo, interwoven with roots and vines which are displeasing to the evil beings (Plate XXVIII).

CEREMONIAL PARAPHERNALIA.—AKOSAN (Fig. 4, No. 4): A prized shell, with top and bottom cut off, is slipped over a belt-like cloth. Above it are a series of wooden rings and a wooden imitation of the shell. This, when hung beside the dead, is both pleasing to the spirit of the deceased, and a protection to the corpse against evil beings.

ANEB (Fig. 4, No. 1): The name usually given to a protective necklace placed about the neck of a young child to keep evil spirits at a distance. The same name is also given to a miniature shield, bow and arrow, which hang above the infant.

DAKĪDAK (Fig. 4, Nos. 3—3a): Long poles, one a reed, the other bamboo, split at one end so they will rattle. The medium strikes them

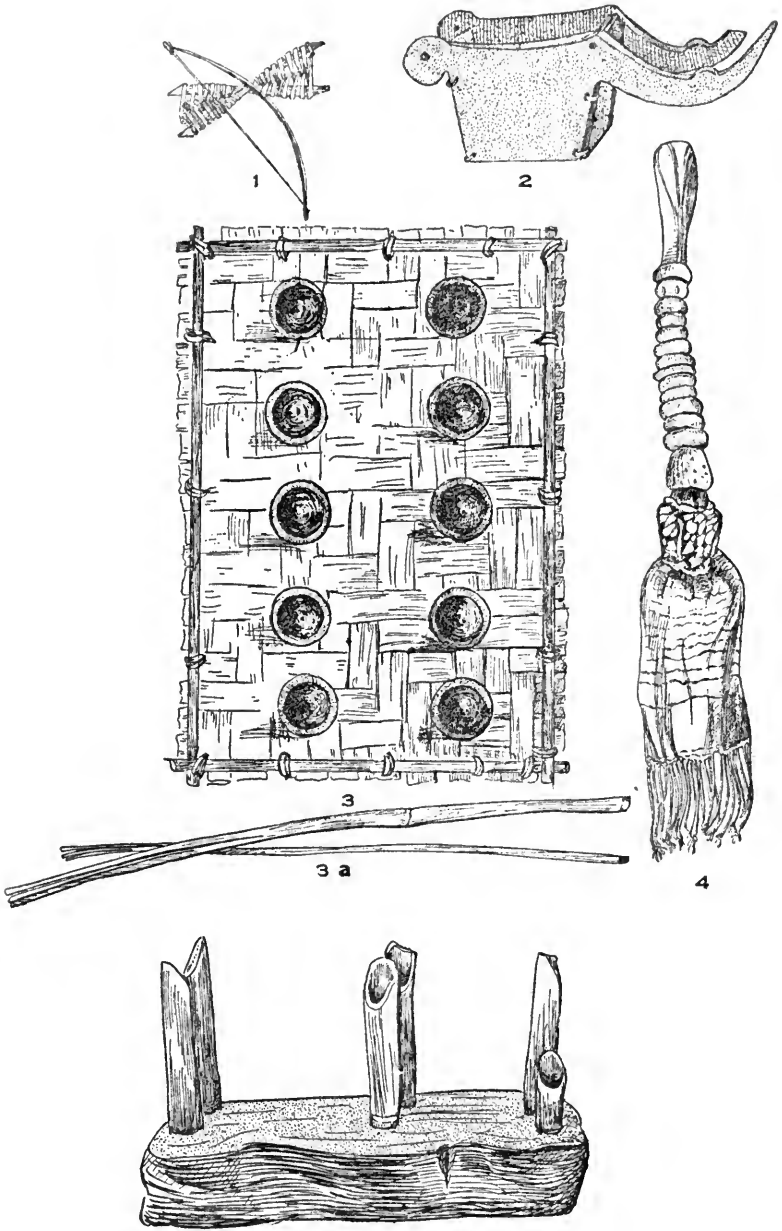


FIG. 4.
CEREMONIAL PARAPHERNALIA.

on the ground to attract the spirits to the food served on the *talapītap*.

IGAM: Notched feathers, often with colored yarn at the ends, attached to sticks. These are worn in the hair during the *Pala-an* and *Sayang* ceremonies, to please the spirits of the east, called *Idadaya*.

INÁLSON: A sacred blanket made of white cotton. A blue or blue and red design is formed, where the breadths join, and also along the borders. It is worn over the shoulders of the medium during the *Gīpas* ceremony (cf. p. 263).

LAB-LABÓN: Also called **ADUG**. In Bunge and nearby towns, whose inhabitants are of mixed Tinguian and Kalinga blood, small incised pottery houses are found among the rice jars, and are said to be the residences of the spirits, who multiply the rice. They are sometimes replaced with incised jars decorated with vines. The idea seems to be an intrusion into the Tinguian belt. The name is probably derived from *labon*, "plenty" or "abundance" (Plate XXIX).

PILING (Plate XIX): A collection of large sea-shells attached to cords. They are kept in a small basket together with one hundred fathoms of thread and a Chinese plate, usually of ancient make. The whole makes up the medium's outfit, used when she is summoning the spirits.

PĪNAPA: A large silk blanket with yellow strips running lengthwise. Such blankets are worn by certain women when dancing *da-eng*, and they are also placed over the feet of a corpse.

SADO (Fig. 4, No. 3): The shallow clay dishes in which the spirits are fed on the *talapītap*.

SALOGEGEY: The outside bark of a reed is cut at two points, from opposite directions, so that a double fringe of narrow strips stands out. One end is split, *saklag* leaves are inserted, and the whole is dipped or sprinkled in sacrificial blood, and placed in each house during the *Sagobay* ceremony. The same name is applied to the magical sticks, which are placed in the rice seed-beds to insure lusty plants (cf. p. 309).

SANGÁDEL: The bamboo frame on which a corpse is placed during the funeral.

TABING: A large white blanket with which one corner of the room is screened off during the *Sayang* and other ceremonies. In this "room" food and other offerings are made for the black, deformed, and timid spirits who wish to attend the ceremony unobserved.

TAKAL: Armlets made of boar's tusks, which are worn during certain dances in *Sayang*.

TALAPĪTAP (Fig. 4, No. 3): A roughly plaited bamboo frame on which the spirits are fed during the more important rites. Used in connection with the *dakidak* and clay dishes (*sado*).

TONGÁTONG (Fig. 4, No. 5): The musical instrument, which appears in many ceremonials. It consists of six or more bamboo tubes of various lengths. The players hold a tube in each hand, and strike their ends on a stone, which lies between them, the varying lengths of the cylinders giving out different notes.

V. THE CEREMONIES

A visitor, who enters the Tinguian territory in the period following the rice-harvest, quickly gains the impression that the ceremonial life of this people is dominant. In nearly every village, he finds one or more ceremonies in progress, while work is almost forgotten. This condition exists until the coming of the rains in May, when all is changed. Men and women go to the fields before daybreak, and return only when darkness forces them to cease their toil. During the period when the fields are in preparation, or the rice is growing, few ceremonies are held, except those intended to promote the growth of the crops, to cure sickness, or to ward off impending misfortune.

Aside from the rites, which attend birth, marriage, and similar events, the ceremonies may be placed in two divisions: first, those which may be celebrated by all people; second, those restricted to certain families. The first class we shall designate as the minor ceremonies.

I. THE MINOR CEREMONIES

DAWAK (also called *Bonī* and *Alopag*).—The name *Dawak* is applied to that part of important ceremonies in which the spirits enter the bodies of the mediums. It is also given as a separate ceremony, usually to cure sickness, but in some settlements it follows a birth.

According to tradition, it was taught, together with the *Sayang* ceremony, by the spirit *Kabonīyan* to a woman *Dayapan*; and she, in turn, taught it to others, who were then able to cure sickness.

It is probable that the name comes from *dáwat* (a "request" or "petition"); yet there is little in it which corresponds to prayer or entreaty.

As there was considerable variation in each *Dawak* witnessed by the writer, the complete ceremony is given for the village of *Ba-ak*, together with striking variations from other towns.

In this instance, the rite was held to effect the cure of a sick woman and to learn the desires of the spirits. Two mediums, assisted by several men and women, spent the first afternoon preparing the things to be used. First, a short cane was fashioned out of black wood, rattan rings were slipped over this, and all were placed inside a Chinese jar. A dish of cooked rice was put over the top, as a cover, and a blanket spread over the whole. This was brought close to the patient, the

medium recited a *diam* over it,¹ and then ordered that it remain there throughout the ceremony. On a large mat in the center of the room were placed betel-nuts, coconuts, and leaves, two jars—one empty, the other filled with *basi*—, a large and small head-axe, two spears, and some shells. An empty jar had a string of beads tied around its neck, and inside it was placed a switch, care being taken that a portion of it hung outside. Beside the jar was a basket containing five bundles of unthreshed rice, on which was a skein of thread supporting a new jar. All this was covered with a woman's skirt. Finally a bound pig was laid just inside the door.

When all was complete, three men played on the *tongátong* (cf. p. 314), until one of the mediums took her place beside the mat. Raising a plate above her head, she struck it repeatedly with a small head-axe, to call attention of the spirits.² Then she began to chant and wail calling the spirits to enter her body. After two or three moments of song, she was possessed by a spirit, who announced that his name was Ibalinsogwan. He placed a rooster at one end of a spear, and a bundle of rice at the other, did a short dance, and departed. The mediums then seated themselves on opposite sides of the jar of *basi*; each drank of the liquor, and the chant began again. Spirit after spirit took possession of one of the mediums, who then conversed with the other, asked questions concerning the patient, or other matters, and occasionally offered advice. Before his departure, each spirit would drink of the *basi*.

The members of the family were present during most of the day; friends came, and went as they pleased, stopped to listen to or talk with the spirits, drank *basi*, and then went about their work.

Early the second morning, the mediums went to a bound pig in the house, and after placing betel-nut on its back, they poured water into its ear. This caused the animal to shake its head; and, as the water was thrown out, one of the mediums caught it in her hand, and applied it to the sick woman, at the same time chanting, "Go away sickness, be thrown out like this water; let this person be well, for she is now following the custom." As soon as she had finished, two men carried the animal to the river bank, where they killed and singed it. Upon their return to the house, they removed and carefully examined its liver; for, by the markings on it, the people were assured

¹For the *diam* recited at this time, see Traditions of the Tinguian, this volume, No. 1, p. 171.

²More frequently the medium uses a piece of lead or one of the shells of her *piling* for this purpose. In many villages the medium, while calling the spirits, wears one head-band for each time the family has made this ceremony.

that the spirits were pleased with the manner in which the ceremony was being conducted, and hence the prospects for the patient's recovery were very bright. *Gīpas*, the dividing, followed. An old man divided the pig with the medium, but by sly manipulation managed to get a little more than she did. A betel-nut, beeswax, and a lead net-sinker were tied together with a string, and were divided, but again the old man received a little more than his share. Betel-nut was offered to the pair. Apparently each piece was the same, but only one was supplied with lime, and the mortal secured that. He then challenged the medium to see whose spittle was the reddest. Both expectorated on the head-axe, but since the spittle of the medium was not mixed with lime, it was uncolored. In all instances the human being came out victor over the spirit, who sought to take the woman's life. Hence her recovery was assured.

A new spirit possessed the medium, and under her directions the family was placed beneath a blanket, and a coconut was cut in two over their heads. In addition to the fluid of the nut, water was emptied over them, "so that the sickness would be washed away." As soon as the family emerged from the blanket, they went to their *balaua*,¹ and offered food, after which the medium again summoned several spirits. From this time until well into the evening, the guests danced *tadek*, stopping only to be served with food and drink.

The morning of the third and last day was spent in preparing food and other offerings, which were placed on a mat and left, for a time, to be used by the immortals. Later the offerings were consumed by the guests, and the medium summoned the spirit *Agkabkabayo*. This being directed four men to carry the blanket on which the medium was seated to the *balaua*, when they were met by another medium, possessed by the spirit *Balien*. For a time they busied themselves making repairs to the spirit structure, then decorated it by tying strips of shredded coconut leaves to the slats of the floor. They also attached leaves to the *kalang* (cf. p. 310), and inserted betel-nut and leaf. The final act of the ceremony was to prepare four *soloko* (cf. p. 310). In the first was placed a half coconut; in the second was rice mixed with blood; in the third cooked flesh of a fowl; and in the last were four stalks of rice, and some pine-sticks. One was placed at each gate of the town as an offering, and the people returned to their homes.

As payment for their services, the mediums received a small portion of the pig, some rice, beads, a little money, and cloth.

¹ Had they not possessed a *balaua*, they would have made this offering in the dwelling.

The acts and conversation of the spirits when summoned in *Dawak* are well illustrated by the following.

A woman of Lagangilang was ill with dysentery; and a medium, in this instance, a man, was instructed to make *Dawak*. He began summoning the spirits by striking a dish with his head-axe. Soon he covered his face with his hands, began to sway to and fro, and to chant unintelligible words. Suddenly he stopped and announced that he was the spirit Labotan, and that it was his wish that blood and rice be placed on a head-axe, and be laid on the woman's abdomen. Next he ordered that they should feed some rice to the small pig which lay bound on the floor. "If he eats, this is the right ceremony, and you will get well," he said. The pig refused the food, and, after expressing regret that he was unable to help, the spirit departed, to be succeeded by Binoñon. He at once directed that the pig be killed, and the palpitating heart be put on the woman's stomach, and then be pressed against each person in the room, as a protection against illness. At first he refused to drink the liquor which was offered to him, for it was new and raw; but when he learned that no other could be obtained, he drank, and then addressed the patient. "You ate something forbidden. It is easy to cure you if the spirits have made you ill; but if some one is practising magic, perhaps you will die." With this cheering message the spirit departed, and Ayaonwán appeared. He directed an old woman to feed rice and water to the patient, and then, without further advice, he said, "The other spirits do not like me very well, so I cannot go to their places. I went to their places, but they said many bad words to me. I offered them *basi*, but they did not wish to take; so I asked the way, and they showed me to the other spirits' place. I was poor, and had nothing to eat for noon or night. When I was in the road, I met many long snakes, and I had to push them apart so I could walk. And I met many eels, and asked of them the road; but the eels bit me, and took me into their stomachs, and carried me to Luluaganan to the well there; then I died. The people, who go to the well, say, "Why is Ayaonwán dead? We have a bad odor now;" and the eels say, "Whose son is this?" and they rubbed my dead spirit, and I received life again. Then I took blood and rice with me to the sky to the other eels to make *Sayang*. The eels gave me gold for my wrists; the monkeys gave me gold for my teeth and hair; the wild pig gave me bracelets. There is much more I can tell you, but now I must go." The spirit departed, and a new one was summoned. This spirit took the spear in his hand, and after chanting about the illness of the woman, he drank *basi* out of a dish, sitting on the head-axe. Then singing again he

dipped the spear in the oil, and allowed it to fall drop by drop on the stomach of the sick woman; later he touched the heads of all present with the spear, saying, "You will not be sick any more," and departed.

PĪNÁING or PINÁDING (Plate XXX).—At the gate or entrance of nearly every village will be found a number of peculiarly shaped, water-worn stones, either beneath a small shelter, or nestling among the roots of some great tree. These are the "guardian stones," and in them lives Apdel ("the spirit who guards the town"). Many stories cluster about these *pīnáing*,¹ but all agree that, if proper offerings are made to them at the beginning of a great ceremony; when the men are about to undertake a raid; or, when sickness is in a nearby village, the resident spirit will protect the people under his care. Thus it happens that several times each year a group of people may be seen early in the morning, gathered at the stones. They anoint the head of each one with oil, put new bark bands on their "necks," after which they kill a small pig. The medium mixes the blood of the slain animal with rice, and scatters it on the ground while she recites the story of their origin. Then she bids the spirits from near and far to come and eat, and to be kindly disposed.

In Bakaok and some other villages it is customary for the medium to summon several spirits at this time, and this is followed by the dancing of *tadek*. The people of Luluno always hold a ceremony at the *pīnáing* before the planting of the rice and after the harvest.

Following this ceremony in the village of San Juan, a miniature raft (*taltalabong*) was loaded with food and other presents, and was set afloat, to carry provisions to any spirit, who might have been prevented from enjoying the feast.

These stones are of particular interest, in that they present one of the few instances in which the Tinguian associates supernatural beings with natural objects.

SALOKO (Plate XXV).—Besides the houses, in the fields, and at the gate of many villages, one often sees long bamboo poles with one end converted into a basket-like receptacle. Offerings of food and betel-nut are now found in them; but, according to some of the older men, these were, until recently, used to hold the heads of slain enemies, as is still the case among the neighboring Apayao.

The ritual of the *Saloko* ceremony seems, in part, to bear out this claim; yet the folk-tales and equally good informants assure us that the heads were placed on sharpened bamboo poles, which passed

¹ See Traditions of the Tinguian, this volume, No. 1, pp. 178-179.

through the *foramen magnum*. It is probable that both methods of exhibiting skulls were employed in the Tinguian belt.

Nowadays the *saloko* found near to the villages are usually erected, during a short ceremony of the same name, as a cure for headache. A medium is summoned; and, after securing a chicken, she strokes it, as she chants:

- "You spirits of the *sagang*,¹ who live above.
- "You spirits of the *sagang*, who live on the level ground.
- "You spirits of the *sagang*, who live in the east.
- "You spirits of the *sagang*, who live in the west.
- "You Lalaman² above.
- "You Lalaman on the wooded hill.
- "You Lalaman in the west.
- "If you took the head of the sick man,
- "You must now grant him health, as you please."

The fowl is killed; and its blood, together with rice and some other gift, is placed in the *saloko*, and is planted near the house or gate. Oftentimes a string of feathers runs from the pole to the dwelling, or to the opposite side of the gate. The family cooks and eats the chicken, and the affected member is expected to recover at once. Should the trouble persist, a more elaborate ceremony, probably *Dawak*, will follow.

In some instances betel-nut prepared for chewing takes the place of the fowl; rice-stalks hang from the sides of the basket, and bits of pine are added "to make bright and clear." All of this is rubbed on the patient's head, while the medium recites the *dīam*.

BAWĪ, also called SINABA-AN and ABABONG.—This name is often applied to the small houses built in the rice-fields for the spirit Kaiban, but more commonly it refers to the little structures of bamboo and grass, which nestle among the banana plantings near the village (Plate XXII). When such a structure is built or repaired, it is accompanied by a ceremony of the same name. The usual purpose of this event is to cure sore feet, but in Patok and other valley towns it is celebrated before the rice harvest and the pressing of the sugar-cane, so that the spirits will keep the workers in good health, and save them from injury.

One of the most common ailments is sore or cracked feet caused, no doubt, by standing for long periods in the mud and water of the rice-fields, and then tramping over the rough, hot trails to the village. The Tinguian, however, know that the spirits, called Abat and Selday

¹ The *sagang* is the sharpened pole, which was passed through the *foramen magnum* of a captured skull.

² Female spirits, who always stay in one place.

bring about this affliction, unless they are kept in good humor, and have something to occupy their time other than disturbing human beings; hence these houses are built for them, suitable offerings are placed inside, and finally a few banana suckers are planted close by, so that the spirits will be kept busy caring for them.

The origin of the ceremony is ascribed to a woman of ancient times, named Bagutayka, who, lacking certain organs, appears as an outcast. She at first caused passers-by to have trouble with their feet and limbs, but later taught them how to effect a cure by building the *barwī* and performing the ceremony.¹

To-day, when a person is afflicted, he summons a medium, the spirit-house is built, and then the following *dīam* is recited over a rooster:

“You abat above,
 “You abat in the ground,
 “You abat in the corner of the house,
 “You abat in the center pole,
 “You abat below the stair,
 “You abat in the door,
 “You Selday in the wooded hill,
 “You Selday above,
 “Make the sick person well, if you please!”²

When the recital is finished, the fowl is killed, and its blood mixed with rice is placed in nine dishes and one polished coconut shell. From these it is transferred to nine other dishes and one bamboo basket. These are placed in a row, and nine dishes and one unpolished shell are filled with water, and placed opposite. In the center of this double line is a dish, containing the cooked flesh of the rooster, also some rice, and one hundred fathoms of thread, while between the dishes are laid ten half betel-nuts, prepared for chewing. Later, all these things are returned to a single receptacle, except those in the shell cups and basket, which are placed in the spirit-house. The underlying idea in this procedure seems to be that frequently found in other ceremonies, namely, that food and water symbolizes the life of the patient, which is partially taken away by the spirits; but when they are returned to one place, the life must be replaced in a like manner.

In Manabo a piece of banana bark is taken from one of the plantings beside a *barwī*; and, after being washed in the water, is applied to the affected limb.

The final act is to take a coconut husk, stick feathers in its sides, and hang it beside the *barwī* as a sign to all that the ceremony has been held.

¹ See Tradition of the Tinguian, this volume, No. 1, p. 178.

² This *dīam* is sometimes repeated for the *saloko* (see p. 319).

No spirits are summoned at this time, neither is there singing or dancing.

BAKID.¹—This ceremony is held to celebrate the completion of a new dwelling, or to remove any bad sign, which may have been received during the building operations.

The medium and her assistants fasten a bamboo pole or rattan cord across one portion of the room, and on it place numerous pieces of cloth-skirts, blankets, belts, a fish-net, and a quantity of false hair. This serves first as an offering to the spirits, but it is also explained that, if the immortals are unable to count all the gifts, they will be powerless to injure the occupants of the dwelling. Should an evilly disposed being desire to make trouble for the owner, he must count every hair in the switches, as well as every hole in the fish-net. Failing in this, he will be compelled by the other spirits to celebrate the *Bakid* ceremony five times at his own expense.

Beneath the line of offerings, a bound pig is laid; and, as she strokes the side of the animal, with oiled fingers, the medium repeats a *dīam*² in which she tells of misfortunes of a family, which failed to observe the signs sent by Kabonīyan, and of his instructions as to how best to overcome their troubles. The family listens respectfully until the story is finished, then they lift a door from its socket, place it in the middle of the floor, and proceed to sacrifice the pig upon it. Some of the blood is immediately sprinkled on the house timbers, particularly those which may have given the builders trouble, either in transportation, or during the erection of the structure. The greater part of the blood is mixed with rice, and is dropped through the slits in the floor, or scattered about for the spirits; while for an hour or more a portion of the meat, the heart, and the head, are placed below the offerings on the cord or on the house-beams. Later, these portions will be cooked and served to the guests. Immediately after the killing, the liver is removed, and is examined for a sign. Should the omens be unfavorable, another animal will be killed, or the family will celebrate *Sangasang* within a few days. If the signs are satisfactory, the host begins to distribute *basi*, and soon good fellowship reigns. One after another of the guests sings the *daleng*, in which they bespeak for the owner a long and prosperous life in his new home. The *Bakid* always ends with a feast, in which the flesh of slaughtered animals plays the important part. Upon its completion, the medium is given a portion of

¹ Known as Palasód in Bakaok.

² See Traditions of the Tinguian, this volume, No. 1, p. 175.

the meat, some unthreshed rice, and other small gifts, as payment for her services. The guests return to their homes, and for two or three days following are barred from entering the new dwelling. During this period the family must remain indoors.

SANGÁSANG.—*Sangásang* is often so similar to the *Bakid*, that one description might cover both. This is particularly true, if it is held to remove a bad sign. Should a large lizard or a bird enter a new building, it is considered as a messenger of Kaboníyan; and the foregoing ceremony is carried out, the only variation being that the bird or lizard is caught, if possible, is anointed with oil, a bead is attached to a leg, and it is then released to go back to its master.

Continued misfortunes to the members of a household would also be an excuse for the ceremony. In this instance, the only variation from the procedure just given would be in the *dīams*. The first to be recited tells how the spirit Maganáwan sent many snakes and birds to the gate of a town to demand the blood of a rooster mixed with rice. The people celebrated *Sangásang*, and sent blood and rice to Maganáwan, who, in turn, spat it out on the ground. As he did so, the sickness and misfortunes of the mortals vanished. The second *dīam*¹ relates a quarrel between the various parts of the house, each insisting on its own importance. At last they recognize their mutual dependence, and the people of the dwelling are again in good health.²

In Lumaba and nearby villages, unpleasant dreams, or a bad disposition are overcome by a ceremony called *Sangásang*; but, as this varies somewhat from the others, it is given in detail.

The medium, who is summoned for this event, calls for oil and a rooster with long spurs. When these are brought, she strokes the fowl with the oil, and chants the following *dīam*. "There is a very old woman in the sea, and she says to her spirits, who are Dapeg (a spirit which kills people), Balingenngen (a spirit which causes bad dreams), and Benisalsal (a spirit which throws things and is unpleasant), 'Go beyond the sea and spread your sickness.' The spirits are going. They arrive and begin their work, and if the people do not make *Sangásang*, many will die. Now it is morning, and the spirits are going to the river to see what the people have offered to the old woman, who is Ináwen. If they do not find anything, they will say, 'All the people in this town shall die,' and then they will go on to another place."

"Ináwen, who is waiting, sends Kideng (a servant) to search for

¹ See Traditions of the Tinguian, this volume, No. 1, p. 174.

² *Op. cit.*, p. 175.

the spirits, who are killing people, to tell them to return. Dapeg leaves the first town. He goes to another, and the dogs bark so that the people cannot sleep. A man opens the door, to learn the cause of the barking, and he sees a man, fat and tall, with nine heads, and he carries many kinds of cakes. The man says, 'Now take these cakes, and if you do not make *Sangásang* for my mistress, at the river, you shall die. You must find a rooster with long tail and spurs; you must mix its blood with rice, and put it in the river at dawn when no one can see you.' The man makes *Sangásang* the next night, and puts the blood, mixed with rice, in a well dug by the river, so that the spirits may take it to their mistress. Kideng also arrives and says, 'you must come with me now, for she awaits you who are bearing this offering.' They go and arrive. Their mistress eats and says, 'I did not think that the blood of people tasted so badly, now I shall not send you again, for you have already killed many people.' "

When this chant is completed, the chicken is killed, as directed in the song; and at night the blood and rice are offered beside the stream.¹ The chicken is eaten by the family, and its feathers are tied to a string, stretched across the room. Leaves are attached to the house-ladder as a warning that all visitors are barred, and for three days the family remains quietly indoors.

SAGOBAY.²—This is one of the most widespread of the ceremonies, for it not only covers the entire Tinguian belt, but extends into the Igorot villages of the Upit river region and Ilocos Sur, as well as into the Kalinga villages of the Malokbot valley.

Its occurrence in connection with the rice-culture is fully described elsewhere (cf. p. 400), so that at this place only its second function, that of keeping illness from the town, is described.

When an epidemic appears in a nearby settlement, the *lakay* summons the old men in council, and they decide on the number of pigs, and the amount of rice, *basi*, and other articles required, after which the necessary funds are secured by levying a tax on all the people of the village.

To keep the evil spirits, who bear the sickness, out of the town, a cord of bamboo or rattan is stretched around the whole settlement, while at the gate a high fence is erected. Through the uprights of this fence are stuck bamboo spikes with the sharpened ends facing

¹ In Patok this offering is placed in a *saloko*, which is planted close to the stream.

² Known in Ba-ak and Langiden as Dayá, in Patok and vicinity as Komon or Ubaiya.

outward, so as to catch or pierce the intruders (Plate XXVIII); while in the *saloko* and along the gateway are placed leaves, roots, and other offerings acceptable to the friendly spirits. Similar cords and leaves are also strung around the entrances to the houses.

The cord and gateway form an adequate protection, and no human being or spirit will violate this taboo. Should a human do so, the least penalty would be a tax sufficient to pay all the expense of the ceremony; but should the sickness afterwards invade the town, it is quite possible that more serious punishment might be exacted by the families of the victims.

When all is prepared, the men and boys arm themselves, and with shouts and hostile demonstrations drive the sickness toward the town whence it is thought to come.¹ Returning to the center of the village, the people dance *tadck*, and the mediums may summon several spirits. Next, the pigs are killed, and their livers are examined for a sign. Should the omens be unfavorable, one or more fowls will be sacrificed, until it seems certain that the help of the spirits is assured, after which the flesh is cooked and eaten. Then a small covered raft (*taltalabong*) is constructed, and a portion of the food is placed inside. Late in the afternoon, this is carried through the village, while one or more drummers keep up a din to frighten evil spirits away. Just as the sun is sinking, the raft is carried to the river, and is set afloat, in order that any interested spirits, who may have been prevented from attending the ceremony, may still receive their share of the offering. In Likuan a different explanation is offered for the *taltalabong*. Here they say that the offerings are placed on the raft, so as to induce any hostile spirits who may be near to enter, and then they are carried out and away from the town.

The blood of the slaughtered animals has been saved, and upon their return from the river the people dip leaves into it, and attach these near to the doors of their dwellings. For at least one day following, no work is done, and all visitors are barred. During this time the people only converse in low tones, and take special precautions against even animals making a noise. The beaks of roosters are tied, or they are placed in small baskets, so that they cannot stand up to crow.

In Lakub a new house or protection is placed above the guardian stones, and offerings are made to them at the time of the *Sagobay*, while in Likuan the participants wear neck and ankle bands of bamboo as a further protection from the sickness.

¹ This part of the ceremony is often omitted in the valley towns.

NGORONG-OR.—Lumaba and the Tinguian villages of Ilokos Sur hold this ceremony, whenever a person is seriously ill with stomach trouble. As the rite does not extend far into the Tinguian belt, but is found in the Igorot villages farther south, it seems likely that it is an importation from that region.

The members of the family gather in the afternoon, and kill a small pig by cutting off its head. A part of the blood is saved, and the balance is sprinkled against the house posts and ladder. The pig itself is hung from one round of the ladder, so that its blood will drip to the ground. The medium has been standing quietly to one side watching, but now she calls upon the spirits, "You (calling one or more by name), come out; be vomited up, for now you are being fed." She allows them a few minutes for their repast, then cuts open the carcass and removes the liver. A bit is cut from the top, then she splits open the animal's skull, and removes a little of the brain. This she places on a banana leaf; and, after adding a small piece of gold, wraps it up and buries it beside the center post of the dwelling. The animal is now cooked and served to the guests, but liberal portions are placed on the house rafters and other places convenient for the spirits.

Next morning a piece is cut from a dog's ear, is smeared with blood, and is placed in a small split bamboo, together with two stalks of rice. A clout is tied to a spear, and all are rubbed on the body of the patient, while the medium explains that this is the betel-nut of the spirits, and that, when she takes it from the village, they will go also, and the recovery be assured. The family follows her to the gate of the town, and watches closely, as she thrusts the spear and pole into the ground; for if they are firmly set in the ground, yet lean away from the village, it is certain that the spirits have departed, and the sick will recover.

Following the ceremony, members of the family may not work for five days, neither may they lead a horse or carabao, or eat of wild meat. Should they do any of the things forbidden, they will be struck by lightning.

SAPATÁ THE OATH.—If a theft has been committed, and it has been impossible to detect the guilty person, the following procedure takes place. A rice-mortar is placed in the yard, and on it a dish of *basi*. All the people are summoned to gather, and one by one they drink of the liquor, meanwhile calling on the snakes to bite them, the lightning to strike them, or their abdomens to swell up and burst if they are guilty. Soon the people will know the culprit, for one of these disasters will befall him. When that occurs, his family will be compelled to make good the theft, as well as the expense of this gathering.

2. THE GREAT CEREMONIES

In addition to the ceremonies and rites which may be celebrated by all the people there are a number of more elaborate observances, which can only be given by those who have the hereditary right, or who have gained the privilege by a certain definite procedure.

In general these ceremonies are restricted to the villages in or close to the valley of the Abra, the lower reaches of the Tineg, Malanas, and Sinalong rivers. As one proceeds up the tributary streams into such settlements as Baay, Likuan, and Lakub, it is noticeable that the typical spirit houses become fewer in number, while the participants in the accompanying ceremonies are limited to recent emigrants from the lower valleys. The same thing is found to be true on the western side of the coast range of mountains, as one goes north or south from the Abra river, although there is evidence here that some of the settlements formerly had these rites, but have allowed them to fall into disuse, as a result of Ilocano influence.

This distribution of the great ceremonies seems to give a hint that they are intrusive; that they probably were at one time restricted to the families of emigrants and even to-day are barred from a part of the people. They have not yet extended far into the interior, despite the fact that in the lower valleys they almost completely dominate the life of the people during a portion of the year.

In all the valley towns one sees little houses and platforms, apparently of no practical value, yet occupying important places, while in the period following the rice-harvest elaborate festivals are carried on about them. Soon it develops that each of these structures has a definite name, is associated with a particular ceremony, and is built and kept in repair in honor of certain powerful spirits.

The culmination of these rites is the great *Sayang* ceremony which extends over seventeen days and nights. When this is held, it includes all the minor events of this class, and the smaller spirit structures are then built or repaired. This supreme event can only be celebrated by a few families, but all the townpeople are welcome guests, and all, regardless of age and sex, may witness or take part in the proceedings.

Since all the great events occur after the harvest, a time of leisure and plenty, they become the great social events of the year. A person who does not have the hereditary right to the ceremonies may gain the liberty if he be warned in a dream or be notified by the spirits that it is their wish. Since all the expenses of such a gathering fall on the giver, it is imperative that he be well-to-do. Such a one gives the ceremonies, in order, during a term of years, and eventually obtains

the right to the *Sayang*, the greatest social and religious event in Tinguian life.

Adoption entitles an individual to all the privileges of the family, and as the writer and his wife were adopted into a family possessing the right to all the ceremonies, they became at once participants in all the events which are here described. In this way it was possible to obtain information and instruction on many points which observation alone could scarcely afford.

The *Pala-an* ceremony is the first round on the social and religious ladder. It is here given in some detail, and is then followed by others, in the order of their importance.

PALA-AN.—The *Pala-an* is held when some member of the family is ill, or when the structure of that name needs repair. Many spirits visit the people during this rite, but the one chiefly interested is *Īdadaya*, the spirit of the east. He and his ten grandchildren wear in their hair the notched tail-feathers of a rooster, which are known as *īgam*. From time to time these lose their luster, and they can only be refreshed by having some mortal celebrate *Pala-an*.

When it appears that these ornaments need attention, the *Īdadaya* will notify some family, either through a medium or by sending illness to them.

A family having received such a notification summons a medium, and she at once begins to gather *saklag* (*Justicia gendarussa* L.) and *sikag* (*Lygodium* sp. near *scandens*) and a grass known as *bildis*, while the men secure the bamboo and other materials used in building the spirit structure. One corner of the living room is screened off with a large white blanket called *tabing*, and behind it the medium places unthreshed rice and jars which she has decked with vines and leaves.

While she is thus engaged, the men are busy building the *pala-an* (Plate XXIV). This consists of four long poles—three of bamboo and one of a resinous tree, *anteng*,¹ set in a square and supporting, near the top, a platform of bamboo.

A number of women have been invited to assist the family, and they now proceed to beat out sufficient rice to serve the guests. When the pounding is finished, a rice-mortar is set out in the open, and a little rice is placed in it. The women, armed with long pestles, gather

¹*Canarium villosum* Bl. The resinous properties of this tree are supposed to make bright or clear, to the spirits, that the ceremony has been properly conducted. According to some informants, the *pala-an* is intended as a stable for the horse of *Īdadaya* when he attends the ceremony, but this seems to be a recent explanation.

around and, keeping time to the music of copper gongs, they circle the mortar contra-clockwise, striking its edge three times in regular beats of 1, 2, 3; on the next beat the leader strikes the bottom of her pestle against that of her neighbor, on the first and second beats, but on the third she pounds the rice in the mortar. This is repeated by the woman on her right and so on around the circle. Then the leader strikes the top of her pestle against the top of the one held by the women next her on two beats and on the third pounds rice, and this is repeated by all. The music now becomes much faster, and, keeping time with it, the leader strikes first into the rice, then whirls clear around and strikes the pestle of the woman on her left; again she turns and strikes that of the woman on her right. Each follows her in turn, and soon all are in motion about the mortar, alternately pounding the rice and clashing pestles. This is known as *kítong*, and is the method prescribed by the great spirit Kabonīyan for the breaking of a part of the rice to be used in this and other ceremonies (Plate XXXI).

As soon as the pounding is finished, the medium places some of the newly broken rice in a bamboo dish, and places this on a rice winnow. She also adds a skirt, five pieces of betel-nut, two piper leaves, and a little dish of oil, and carries the collection below the *pala-an*, where a bound pig lies. The betel-nut and leaf are placed on the animal, then the medium dips her fingers in the oil, and strokes its side while she recites the following *dīam*:—

“The spirit who lives in Dadaya lies in bed; he looks at his *īgam*, and they are dull. He looks again, ‘Why are my *īgam* dull? Ala, let us go to Sudipán, where the Tinguian live, and let us take our *īgam*, so that some one may make them bright again.’ After that they laid them (the *īgam*) on the house of the Īpogau, and they are all sick who live in that house. Kabonīyan looked down on them. ‘Ala, I shall go down to the Īpogau.’ He truly went down to them, ‘What is the matter with you?’ ‘We are all sick who live in the same place,’ said those sick ones. ‘That is true, and the cause of your sickness is that they (the spirits) laid down their *īgam* on you. It is best that you make *Pala-an*, since you have received their *īgam*, for that is the cause of your illness.’ After that they made *Pala-an*, and they recovered from their sickness, those who lived in the same place. (Here the medium calls the spirits of Dadaya by name and then continues.) ‘Now those who live in the same place make bright again those *īgam* which you left in their house. Make them well again, if you please.’”

As soon as she finishes her recital, the pig is stabbed in the throat,

its blood is collected, and is mixed with cooked rice. The carcass is singed at once. Five men then carry it to the top of the *pala-an*, where it is cut up. The suet and the hind legs are handed to the medium, who places them behind the screen in the room, and the family may then rest assured that the spirits thus remembered will free them from headache and sore eyes. After the flesh has been cut into small pieces, most of it is carried into the dwelling to be cooked for the guests, but a portion is placed in a bamboo tube, and is cooked beneath the *pala-an*. When it is ready to serve, the five men again go to the top of the structure and eat it, together with cooked rice, then they take the bamboo cooking tube, tie some of the sacred vines from behind the curtain about it, and fasten it to one pole of the *pala-an*. The men in the house are free to eat, and when they are finished, the women dine.

In the cool of the afternoon, the people begin to assemble in the yard, where they are soon joined by the medium carrying a spear in one hand, a rooster in the other, and with a rice winnower atop her head. She places the latter on a rice-mortar close to the *pala-an*, and uncovering it reveals a small head-axe, notched chicken feathers, her shells, five pieces of betel-nut and two leaves, a jar cover, a dish of oil, and a coconut shell filled with rice and blood.

At the command of the medium, four or five men begin to play on copper gongs, while the wife of the host comes forward and receives the spear and rooster in one hand. The medium takes the head-axe, and then the two women take hold of the winnower with their free hands. Keeping time to the music, they lift it from the mortar, take one step, then stop, strike the spear and head-axe together, then step and stop again. At each halt the medium takes a little of the rice and blood from the winnower and sprinkles it on the ground for the spirits to eat.¹ When they have made half the circuit of the mortar, they change places and retrace their steps; for "as they take the gifts partly away and then replace them, in the same manner the spirits will return that part of the patient's life which they had removed, and he will become well and strong again."

The blood and rice which remain after this dance is placed on nine pieces of banana bark. Five of these are carried to the *pala-an*; one to the east and one to the west gate of the town; one is put on the *talagan*, a miniature seat erected near by for the convenience of visiting

¹ This feeding of the spirits with blood and rice is known as *pisek*, while the whole of the procedure about the mortar is called *sangba*.

spirits, and one in a little spirit house known as *tanggap* (cf. p. 311). For an hour or more, the medium makes *dawak*, and summons many spirits into her body. When the last of superior beings has made his call, the medium goes to her home, carrying her payment for the day's work,¹ but the townspeople remain to drink *basi* and to sing *da-eng* until well into the night.

Early the next morning, the medium goes to the house, and removing the jars and the bundle of decorated rice from the *tabing*, carries them to the family's rice granary, and places them in the center of that structure, covering them with six bundles of rice. This is an offering to the spirit residing there, and for the next five days the granary must not be opened.

Nothing more of importance takes place during the morning, but late in the afternoon the people assemble in the dwelling to drink *basi*, while one or more mediums summon the spirits. After a time a sterile female pig is brought in and placed in the center of the room. Two men armed with long knives slice the animal open along the length of its stomach. An old man quickly slips in his hand, draws out the still palpitating heart, and hands it to a medium, who in turn strokes the stomachs of members of the family, thus protecting them from intestinal troubles. She also touches the guests and the articles which have been used during the day. For this second day this medium receives, as pay, the head and two legs of the pig, a hundred fathoms of thread, a dish of broken rice, and five bundles of unthreshed rice. She also is given a small present in exchange for each bead she received when the spirits entered her body.

Following the ceremony, the members of the family are barred from work, usually for one moon, and during this period they may not eat of wild pig or carabao, of lobsters or eels. An infraction of this rule would incur the wrath of the spirits and result in sickness and disaster.

TANGPAP.—In many of the valley towns *Tanggap* is only a part of *Sayang* (cf. p. 345), and is never given alone, but in Manabo, Lagan-gilang, and nearby settlements it is recognized as one of the ceremonies which must be celebrated before a family acquires the right to *Sayang*. In these villages it follows *Pala-an* after a lapse of two or three years. It was during the progress of this ceremony in the village of Manabo, in 1908, that the writer and his wife were made members of the tribe,

¹This consists of two bundles of rice, a dish of broken rice, a hundred fathoms of thread, one leg of the pig, and a small coin.

and since the mediums were particularly anxious that we know all the details, the information in this instance is unusually complete. It is here given in full, as an excellent example of how all are conducted.

A Manabo woman, the wife of Sagasag, was seized with an illness which deprived her of the use of her limbs, and when other means of relief failed, was told by the spirits to give the *Tangpap* ceremony, to which she already had a hereditary right. A medium was summoned, and she, with two assistants, began to prepare many presents for the spirits who were expected to attend the ceremony. From previous experience it was known the sort of gift each would appreciate, and by the end of the second day the following things were in readiness.

For the spirits Bakod and Olak,¹ a rice winnowing tray was loaded with a shield, a clay dish, a coconut shell filled with *basi*, a string of beads, a small basket, two bundles of rice, and leaves of the *atilwag* (*Breynia acuminata*), later the half of a slain pig was also added.

Cords were attached at each corner of the living room, and beneath the points where they crossed was a mat on which the mediums were to sit when summoning the spirits. On the cords were leaves, grasses, and vines, the whole forming a decoration pleasing to the superior beings, I-anáyan and I-angáwan.

For Gapas they provided two small baskets of rice, a shell called *gosipeng*, and a rattan-like vine, *tanobong*, betel-nuts and piper-leaf.

Bogewan received a basket of rice, some white thread, sections of *posel*—a variety of bamboo—, *atilwag* leaves, and some beads. For Bognitan, a jar was partly filled with *tanobong*, and for Gilin, a jar of *basi*. Cooked rice was moulded into the form of an alligator, and was spotted with red, betel saliva. This, when placed on a basket of rice, was intended for Bolandan.

Soyan was provided with a basket which contained the medium's shells and a cloth, while Ibaka received a jar cover filled with salt. Dandawila had to be content with a stem of young betel-nuts, and Bakoki with two fish baskets filled with pounded rice, also a spear. A large white blanket was folded into a neat square, and on it was laid a lead sinker for the use of Mamonglo.

As a rule, three spirits named Mabeyan attended this ceremony. For the first, a bamboo frame was constructed, and on it was placed a female pig, runo (a reed), and prepared betel nut. For the second, a shield, fish net, rice and a rice winnowing tray, and a bit of string; while

¹ Many spirits which appear here and in *Sayang* are not mentioned in the alphabetical list of spirits, as they play only a local or minor role in the life of the people.

for the third, a rice winnower was set with eight coconut shells, a small dish, and a gourd dipper.

During a considerable portion of the time that these articles were being prepared, several men sat in the yard and played on the *tongátong*, but when the mediums finally gave the signal that everything was in readiness, they moved their instrument up on the porch of the dwelling, where they continued playing softly.

One of the mediums took her place in the mat in the middle of the room, and raising a Chinese plate above her head, began to strike against it with her shells, in order to notify the spirits that the ceremony was about to begin. Next she placed two dishes on the mat in front of her, and as she sang a monotonous chant, she touched each one with a small stick. The host was then ordered to shuffle his feet between the lines of dishes and to step over each one. As soon as he did so, the medium pulled the mat from beneath them, rolled it up, and used it as a whip with which she struck the head of each member of the family. The spirit who had caused the woman's illness was supposed to be near by, and after he witnessed this whipping, he would be afraid to remain longer. As a promise of future reward to the well-disposed immortals, a bound pig was then placed beside the door of the dwelling.

Going to the hearth, the medium withdrew burning sticks, and placed them in a jar, and held this over the head of the sick woman, for "a spirit has made her sick, but the fire will frighten him away, and she will get well." After she had made the circuit of the family, she held a bundle of rice above the flames, and with it again went to each person in the room; then she did the same thing with broken rice and with the *atilwag* vine.

Two mediums then seated themselves on the mat, and covering their faces with their hands, began to chant and wail, beseeching the spirits to enter their bodies. One after another the spirits came and possessed the mediums, so that they were no longer regarded as human beings, but as the spirits themselves. First came Kakalonan, also known as Boboyonan, a friendly being whose chief duty it is to find the cause of troubles. Addressing the sick woman, he said, "Now you make this ceremony, and I come to make friends and to tell you the cause of your trouble. I do not think it was necessary for you to hold this ceremony now, for you built your *balaua* only two years ago; yet it is best that you do so, for you can do nothing else. You are not like the spirits. If we die, we come to life again; if you die, you do not." At this point an old man interrupted, and offered him a drink of *basi*.

At first Kakalonan refused, saying he did not want to accept any payment; but finally he yielded and drained the coconut shell of liquor. After assuring the family that all would be well with them when the ceremony was complete, he took his departure.

The next spirit to come was Sagangan¹ of Anayan. He appeared to be in a rage, because the proper present had not been prepared for his coming, and was expressing himself vigorously when a passing woman happened to touch him, and he at once departed. The medium chanted for a long time, urging him to return, and finally he did so. At once he demanded that two bundles of rice have wax heads moulded on them, and that black beads be inserted for eyes. These, he assured them, would serve him as well as the woman's life, so he would make the exchange, and she would get well.

When the dolls were prepared, he addressed the husband, "My other name is Ingalit, and I live in the sky. What is the matter with the woman?" "I do not know," replied the man. "We ask you." "You ask me, what is the matter with this woman, and I will tell you. How does it happen that Americans are attending the ceremony?" The husband replied that the Americans wished to learn the Tinguian customs, and this finally seemed to satisfy the superior being. Turning toward the door where the men were still softly playing on the *tong-átong*, he called out peevishly, "Tell the people not to play on the *tong-átong*, for the spirits who wish to hear it are not present, and we are ashamed to have the Americans hear it. You make this ceremony now because you are sick and do not wish to die, but you could have waited two years."

While this spirit was talking, another, who said he lived in Langbosan, and had been sent by Gilen, came to the body of the second medium. Paying no attention to the other spirit, he began to give instructions for the conduct of the ceremony. The *tangpap* was to be build the next morning, also two *balags* (p. 308), and for them they were to prepare one pig. "Do not fail to prepare this pig, but you may use it for both *tangpap* and *balag*. You will also make a *taltalabong* (p. 311). For this you must prepare a different pig, for this is for the sons and servants of Kadaklan."

After the departure of these beings, ten other spirits came in quick succession. Two of the latter claimed to be Igorot spirits, and both

¹ The spirit who lives in the *sagang*, the sharpened bamboo sticks on which the skulls of enemies were displayed.

talked with the peculiar stacatto accent of the people who live along the Kalinga-Igorot border.¹

After the departure of the Igorot spirits, both mediums were possessed, one by Sanadan, a male spirit, and the other by the female spirit of Pangpangdan. At their request the men began again to play on the *tongátong*, and the spirits danced. Soon Sanadan began to fondle the woman, to rub her face with his, to feel of her body and at last of her privates. Other spirits, who stayed only long enough to drink, followed them, and then Gonay appeared. The spectators had been openly bored by the last few visitors, but the name of Gonay quickly revived their interest. She began to sing a wailing song in which she told of her sad plight. Time after time she repeated the sentence, "Gongay has no husband, for her mother put a stone in her vagina, yet she loves all young men." From time to time she would pause, and make ludicrous attempts to fondle the young boys, and then when they resisted her, she again took up her plaint. At last she succeeded in getting one young fellow to exchange cigars and headbands with her, and began to rub her hands on his body, urging him not to leave her. Just when she seemed on the verge of success in winning him, another spirit Baliwaga came to the medium, and the fun-maker had to depart. The newcomer placed an agate bead in a dish, and held it high above his head while he danced. Finally he called out that the bead had vanished, but when he lowered the plate, it was still there, and he left in chagrin. He was succeeded by a dumb female spirit named Damolan, who undertook to do the trick in which her predecessor had failed. Holding the plate high above her head, she danced furiously, and from time to time struck against the side of the dish with the medium's shells. Twice when she lowered the dish, the bead was there, but on the third attempt it had vanished. The trick was so cleverly done that, although we were beside her and watching closely, we did not detect the final movement. With much satisfaction, the medium assured us that the bead would be found in the hair of the man who broke the first ground for the *tangpap*, a boast which was made good the following morning.

Adadog came next, and not finding the chicken which should have been placed on the mat for him, he broke out in a great fury and tried to seize a man in its place. He was restrained from doing injury to his victim, and soon left, still highly indignant. Seven other spirits

¹This is of particular interest, as the Tinguian are hostile to the people of this region, and it is unlikely that either of the mediums had ever seen a native of that region.

stopped only for a drink, and then Daliwaya appeared. Upon her arrival, one of the headmen gravely informed her that the people wished to adopt four Americans, but that only one was then present. The spirit bade the writer to arise from the mat, where he was lying, and after stroking his head for a time, said, "You wish to make this American an *Itneg*,¹ but before you can do anything, the spirits must approve and give him a name. I will give him a name now, and then to-morrow all the people must say if they wish to give him another name and make him *Ipogau*.² His name shall be *Agonan*, for that is the name of the spirit who knows many languages." Again she stroked the writer's head, and then taking a large porcelain platter, she filled it with *basi*, and together we drank the liquor, alternately, a swallow at a time.

After her departure, an *Alzado*³ came and danced with high knee action, meantime saying, she was there to make some one ill, and that she would do so unless the American gave her a cloth for her clout when she returned the following day.

The next visitor was *Sanadan*, the spirit who owns and guards the deer and wild pig. Up to this time the people had been mildly interested in the arrivals, but when this important being appeared, the men at once became alert; they told him of their troubles in the hunts, of the scarcity of deer, and urged him to send more of them to Mt. *Posoey*, where they were accustomed to hunt. He offered much good advice concerning the methods of hunting, but refused to take any action regarding the game on the nearby mountain, for, he said, the spirit *Dapwanay* who owns *Posoey* was watching the game there. Just before he departed, he called to the headmen, "I am very rich and very bold. I am not afraid to go anywhere. I can become the sunset sky. I am going to *Asbinan* in *Kalaskigan* to have him make me a shoe of gold. To-morrow you must not use any of the things you have had out-of-doors, but you may make use of them when you build the *taltalabong*."

The last spirit to come that night was *Ablalansa* who keeps guard over the sons of *Kadaklan*. He paused only for a drink and to tell the people that *America* was very near to the place, where the big birds live who eat people.

¹ The name by which the Tinguian designate their own people.

² The spirits' name for the Tinguian.

³ The term *Alzado* is applied to the wilder head-hunting groups north and east of *Abra*.

It was midnight when the medium informed us that no more spirits would come that evening, and we went to rest.

About six o'clock the next morning, the women began the ceremonial pounding of the rice known as *kítong* (cf. p. 329) in the yard, while one of the mediums went to the bound pig lying in the dwelling and recited a *díam* as she stroked its side; she also poured a little *basi* through the slits in the floor for the use of any visiting spirits. While the women were thus engaged, the men were busy constructing spirit houses in the yard. Of greatest importance was the *tangpap* (Plate XXVII), a small bamboo structure with a slanting roof, resting on four poles, and an interwoven bamboo floor fastened about three feet above the ground.¹ Near one of the house poles a funnel-shaped basket was tied, and in it was set a forked stick, within the crotch of which was a little floor and roof, the whole forming a resting place for the Igorot spirits of Talegteg. The *pala-an* needed a few repairs, and two of the old men looked after these, while others made two long covered bamboo benches which might be used either by visiting men or spirits.² Four long bamboo poles were set in the ground, and a roof placed over them to form the *bang-bangsal*, a shelter always provided for the spirits of Soyau.

By ten o'clock all was in readiness, and the people then gathered in the dwelling, where the mediums began summoning the spirits. The first to arrive was Omgbawan, a female spirit whose conversation ran as follows: "I come now because you people ought to make this ceremony. I did not come last night, for there were many spirits here, and I was busy. You people who build *tangpap* must provide all the necessary things, even though they are costly. It is good that the Americans are here. I never talked with one before."

Manaldek³ was the next arrival, and as he was one of the spirits who was supposed to have caused the patient's illness, his visit was of considerable importance. He was presented with a spear and prepared betel-nut. The latter was attached to the point of the weapon, and this was pressed against the body of the pig, then the spirit touched each member of the family in order to drive the sickness from them.

Mamonglo ordered the family under a white blanket, and then

¹ When the *tangpap* is built during the *Sayang* ceremony, it is a little house with two raised floors. On the lower are small pottery jars, daubed with white, and filled with *basi* (Plate XX).

² The *talagan* (see p. 308).

³ This being lives in Binogan. His brothers are Gilen, Ilongbosan, Idodosan, Iyangayang, and Sagolo.

touched the head of each person with a lead sinker, while his companion spirit waved a bundle of rice and a firebrand over them, "To take away the sickness which they had sent." Six other spirits came long enough to drink, then Bisangolan occupied the attention of all for a time. He is an old man, a giant who lives near the river, and with his head-axe keeps the trees and driftwood from jamming, and thus prevents floods. For quite a time he chatted about himself, then finally blew smoke over the people, at the same time assuring them that the sickness would now vanish like the smoke. Just before departing he informed the family that a spirit named Imalbi had caused the trouble in the patient's eyes, and that on the next morning they must build a little house, called *balitang*, among the banana trees, and place in it a live chicken.

Gayangayan, a female spirit from Lagayan, followed, rubbed the head of each person, blew smoke over them, and then announced thus: "The people of Layogan¹ must not close their doors when it rains, or it will stop."

The attitude of the people toward the weaker and less important spirits was well shown when Ambayau, a wild female spirit, arrived. She demanded to know where she could secure heads, and immediately the people began to tell her all sorts of impossible places, and made jests about her and her family. Finally they told her to take the head of a certain Christianized native; but she refused, since she had short hair, and it would be hard for her to carry the skull. While she was still talking, the men started to carry the pig from the room, but she detained them, to explain that the people cut the meat into too large pieces, for "we spirits eat only so much," indicating a pinch. The spirit Soyau came for a drink, and then all the people went out to the *tangpap*, where the pig was killed, singed, and cut up. A small pig was laid beside the *pala-an*, and for a time was guarded by the son of the sick woman, who for this event had placed the notched chicken-feathers in his hair, and had put on bracelets of boar's tusks. As soon as she had finished at the *tangpap*, the medium came to the *pala-an*, and having recited the proper *diam* over the pig lying there, ordered it killed in the manner already described for this structure (cf. p. 329). Both animals were then cooked, and soon all the guests were eating, drinking and jesting.

Late in the afternoon, the spirit mat was spread in the yard near to the *tangpap*, and the mediums began summoning the spirits. The

¹The site of the old village of Bukay.

first to come was Mamabeayan, an Igorot spirit for whom the people showed the utmost contempt. They guyed him, threw dirty water on his body, and in other ways insulted him, until in his fury he tried to climb the house posts to punish a group of girls, the worst offenders, but men and women rushed up with sticks and clubs, and drove him back. After a time he calmed down, and going to a bound pig, he addressed it as "a pretty lady," and tried to caress it.

While this clown spirit was amusing the crowd, a second medium brought out ten coconut shells, one of which was filled with blood and rice. These she placed on a winnowing tray, which in turn was set on a rice-mortar. Soon the spirit Ilongbósan entered her body, and commanded the son of the patient to take some of the blood and rice from the one dish, place it in all the others, and then put it back again, "for when the spirits make a man sick, they take part of his life, and when they make him well, they put it back. So the boy takes a part of the blood and rice away, and gives it to the spirits, then puts it back." The spirit was followed by Gilen, who bade the lad take hold of one side of the winnowing tray, while he held the other. Raising it in the air, they danced half way round the mortar, then retraced their steps. "This is because the spirits only partially took the life away. Now they put it back." As they finished dancing, Gilen struck his spear against the boy's head-axe and departed.

The medium, now with her own personality, leaned a shield against the rice-mortar, and in the Δ thus formed she hung a small bundle of rice and a burning cord, while over the whole she spread a fish net. Scarcely had she completed this task, when she was possessed by the spirit of Kibáyen, this being walked round and round the net, seeking for an opening, but without success. Later the medium explained, "The rice and fire represent the woman's life, which the spirit wishes to take; but she cannot, since she is unable to pass through the fish net."

The next visitor was Yangayang, who began to boast of his power to make persons ill. Suddenly the medium fell to the ground in convulsions, and then stretched out in a dead faint. The writer examined her closely, but could not detect her breathing. After a moment, the second medium seized a rooster and waved it over the prostrate form, while an old man gave a sharp stroke on a gong close to her head. The medium awoke from her faint and thus "the death was frightened away."

Mamonglo, who had been present during the morning, returned for a moment to again rub the family and guests with his lead sinker.

While he was thus engaged, the second medium was possessed by Baniyat, a female who made a bit of fun by trying to steal the beads of the young girls, "so the men would love her." Several times she tried to scale the house ladder, but was always repulsed, and each failure was greeted with jeers and ridicule.

Gomogopos, who causes stomach troubles, came, and after dancing before the rice-mortar, demanded that a small pig be laid before the *tangpap*. Scarcely had the animal been deposited, when the spirit seized a head-axe and cut it in two at one blow. Then he dipped the weapon in its blood and applied it to the stomach of each member of the family. "The pig is his pay, and now he takes away his kind of sickness."

The second medium secured a live rooster, and using its wings as a brush, she took up the blood and the two halves of the pig, and put them in the *tangpap*. "The rooster is the spirits' brush, and when the dirt in front of the *tangpap* is cleaned up, then the people will be clean and well inside their bodies." At the command of the medium, the husband of the patient went to the opposite side of the *tangpap*; then she threw a bundle of rice over the structure to him. He caught it, and immediately threw it back. This was repeated six times, but on the seventh the bundle lighted on the roof, where it was allowed to remain. "The spirit threw away the lives of the people, but the man returned them. The bundle is now on the *tangpap*, so now the people's lives will remain safe."

An unnamed spirit was next to appear, and at his command the fore part of the pig was stood upright in the winnower, and a stick was placed in each nostril. These were seized by the spirit, who pumped them up and down, then withdrew them, and stroked each member of the family, while he chanted, "I did this to your lives, so now I must do it to you."

Saking, a lame spirit, called for one of the pig's legs, and with it rubbed the limbs of each member of the family, "so that they will not become ill in their legs."

One of the mediums now became possessed by Mangamian, who carried a feather which he used as a fighting knife. The onlookers seized similar weapons and defended themselves, or drove the spirit away by threatening him with a small dog. A fire had been built near the *tangpap*, and from time to time the spirit would rush up to this, thrust his feather into the flames, and then put it into his mouth. Later it was explained, "He is an evil spirit who tries to kill people. The feather is his bolo. He is like a blacksmith, and when his knife gets

dull, he puts it in the fire, then puts it in his mouth to wet it, so as to make it ring." Three spirits now appeared in quick succession, and discussed with the old men the advisability of adopting the Americans¹ as *Īpogau*. Finally the leader *Ilabdangan* called them to the mat before him and told them their names, and also recited a list of their relations. Then, filling a coconut shell with *basi*, he drank half and presented the shell to each candidate, who had to drain it to the last drop. A circle was formed, and for the balance of the afternoon the new members of the tribe had to dance *tadek* with their relations.

Just before dusk, the Igorot spirit *Daliwáya*, who had been present the night before, appeared and demanded that the American give her cloth for her clout. When she received this, she sang and then instructed the men how to dance in Igorot fashion. When finally they were doing her bidding, she danced beside them with outstretched arms in the manner of the Igorot women. Later, when the medium was again herself, we questioned her concerning her knowledge of this dance, but she professed absolute ignorance.

That evening the people danced *tadek*, for a short time, near to the *pala-an*, then a fire was built beside the *tangpap*, and by its light the visitors danced *da-eng* until far into the night (cf. p. 440).

Early the next morning, the men went to some banana trees near to a rice granary, and there constructed a little spirit house, which resembled the *pala-an*, except that it was only about four feet high. This was called *balitang*, and was made in fulfilment of the orders given by the spirit *Imalbi* on the previous evening. When it was finished, the medium placed a dish of broken rice on it, and then tied a rooster with a belt close enough, so that the fowl could eat of the rice. Returning to the dwelling, she took down a small shield which was attached to the wall, placed new leaves and a dish of oil on it. Then as she stirred the oil, she sang the *Talatal* (Plate XXXII). The significance of this song, which consists only of mentioning the names of prominent men of various villages, seems to be lost. The *kalang*, or spirit box, was then redecorated, food was dropped through the slits in the floor for visiting spirits, and finally the medium held the shield over the heads of the family, beat upon it with a head-axe, while

¹ In addition to the writer and his wife, Lieut. and Mrs. H. B. Rowell were initiated at this time. The Lieutenant had long been a friend and adviser of the tribe, and was held in great esteem by them. The writer's full name was Agonan Dumalawi, Mrs. Cole's—*Ginobáyan Gimpayan*, Lieut. Rowell's—*Andonan Dogyawi*, and Mrs. Rowell's—*Gayankayan Gidonan*.

in a loud voice she asked the spirits that, since the family was now celebrating *tanggap*, they would please make them well again. The shield was fastened to the wall, new offerings of *basi* were placed in the *kalang*, and after it had been swung over the head of the patient, it was again fastened above the house beam near to the roof.

For the next hour the mediums summoned spirits to them. The first five had little of interest to offer, except that each demanded that his liquor be served to him on a head-axe. When the spirit Amangau arrived, he spent the time boasting of his head-hunting exploits; he told of how he had gone to one village, and had killed all the people, except one pregnant woman, and of the dance which followed. Finally he claimed the credit of having killed a man who had recently died in Manabo, and assured the people that his friends were then dancing about the head. The spirit Banbanyalan, who followed, disclaimed any part in the killing just mentioned, but verified the statement of his predecessor.

Tomakdeg came, and after filling his mouth with rice, blew it out over the people, in the same way that the sickness was to be spit out. Meanwhile Bebeka-an, armed with a wooden spoon, tried to dig up the floor and the people on it, "for that is the way she digs up sickness." Awa-an, a spirit of the water, came to inform the people that the spirit of a man recently drowned was just passing the house. Everything else was abandoned for a few moments, while *basi* was poured out of the window, so that the dead might receive drink.

Two female spirits, Dalimayawan and Ginlawan, came at the same time and danced together, while they informed the people of their beauty and their expertness in dancing. Suddenly they stopped, and said that Andayau, the mother of Lakgangan, was near by; then they instructed the host that he should wrap a gourd in a cloth and tell Andayau that it was her son's head, and that he had been killed, because he had stolen carabao. Scarcely had the two visitors departed, when the mother appeared, and being informed of her son's death, she began to wail, "He is lost. No one works the fields, where we planted calabasa. Lakgangan is lost, he who has been killed. Why did you go to steal carabao? We have put Lakgangan in a hammock; we take him to Tomakdang. The *basi* put out for Lakgangan is good. He is lost whom they went to kill. Lakgangan is lost. We take him to Tomakdang."

The song was interrupted by a head-hunting spirit, who demanded the heads of two visiting girls from Patok, but she finally went away satisfied with a piece of cloth which they gave her. Blood and oil were

sprinkled liberally over the ground and the gathering broken up for the morning.

All the forenoon, a small group of men and women, had been constructing a small covered bamboo raft, and had placed in it a sack of rice, which had been contributed by all the people.¹

By four o'clock a large number of people had gathered in the yard near the house, and soon the spirit mats were spread on an old bedstead, and the mediums started again to summon the superior beings. The first two to appear were Esteban from Cagayan and Maria from Spain. They wore gay handkerchiefs about their shoulders, and when they danced, gave an imitation of the Spanish dances now seen among the Christianized natives of the coast. It was quite evident that these foreign spirits were not popular with the people, and they were distinctly relieved when Mananáko replaced them. This spirit has the reputation of being a thief, and the guests had great sport preventing him from stealing the gifts intended for other spirits.

In the midst of this revelry, the other medium was suddenly possessed by Kadaklan—the supreme being. The laughter and jesting ceased, and breathlessly the people listened, while the most powerful being said, "I am Kadaklan. Here in this town where I talk, you must do the things you ought to do. I hear what you say you desire, and I see what you are able to do. Something ill will befall you unless you quickly celebrate *Sagobay* (cf. p. 324), when there are no strangers or Christians in your town. Where is the *basi* which should have been in the place where I first came?"² Without awaiting an answer he vanished, and his wife Agemem took his place and repeated his remarks with little variation.

Sopo, a gambler, next appeared and tossed handfuls of coins into a blanket. He stated that if heads came up, the people won and would have good health, but if they lost, their lives were his. As soon as he threw, the people rushed up, and if they saw any tails they were quickly turned, and the spirit was informed that he had lost.

Kīmat, lightning, came and demanded a drink, which was given. As he is usually considered as a dog, the writer inquired why he had appeared as a man, but was rewarded only by a shrug of the shoulders and the word—*kadauyan* ("custom").

¹ This raft is the *Taltalabong*, and is intended for the sons and servants of Kadaklan.

² It is customary to place a jar of *basi* under or near the house, so that Kadaklan may drink, before he reaches the function. This offering had been neglected, hence his complaint.

Another spirit, *Andeles*, quickly replaced lightning, and with *Sopo* danced on the spirit raft, while the old men put dishes of water and coins inside, and fastened a small live chicken to the roof. The people then tried to induce the spirits to leave, but they refused. Suddenly they were flung aside, and two strong men seized the raft and started to run with it. Immediately the two spirits gave chase and fought viciously all who tried to get in their way, but when, finally, their opponents were joined by an old woman carrying a bundle of burning rice straw and an old man beating a drum, they gave up the chase and vanished. The party proceeded on to the *Abra* river, where they waded out into deep water and set the raft afloat (Plate XXVI).

That evening the guests danced *da-eng*, and the ceremony was over.

Throughout the three days, the mediums had been constantly drinking of *basi*, and while under the strain of the ceremony, they had not appeared intoxicated, but at its conclusion both were hopelessly drunk. The payment for the service was one half of the largest pig, unthreshed rice, and about two pesos in money, which was given in exchange for the beads which different spirits had demanded.

KALANGAN.—In *Manabo* and the villages of that vicinity a period of about seven years elapses between the building of *tangpap* and the celebration of *Kalangan*, but in most of the valley towns the latter ceremony follows *Pala-an* after two or three years.¹ The ceremony is so similar to the *Tangpap* just described that only the barest outline will be given here. The chief difference in the two is the type of structure built for the spirits. *Kalangan* has four supporting timbers to which the flooring is lashed, and from which kingposts go to ridge poles. A bamboo frame rests on this and, in turn, supports an overhanging grass roof (Plate XXIII).

The procedure is as follows: Late in the afternoon, all the necessary articles are brought to the house, then the mediums dance for a time to the music of the *tongátong*. *Basi* is served to the guests, and for an hour or more the spirits are summoned. Next morning the *kalangan* is built, and two pigs are sacrificed beside it. Their blood mixed with oil is offered to the spirits, and many acts, such as distributing the rice into ten dishes and then replacing it in the original container, the churning of sticks in the nose of a slaughtered animal and the like, are performed. Spirits are summoned in the afternoon, and in the evening *da-eng* is danced. On the third day new offerings are placed

¹ This is the case if a person is just acquiring the right to the ceremony. If the family is already privileged to give this rite, it will occur in about three years, and *Sayang* will follow some four years later.

on the spirit shield and hanger; offerings are made at the new structure, numerous spirits appear, talk to and amuse the people, and finally *da-eng* is danced until late evening.

Following the ceremony, all members of the family are barred from work for about one month. They may not eat the meat of the wild carabao, wild hog, beef, eels, nor may they use peppers in their food. Wild fowl are barred for a period of one year.

Kalangan is much more widespread than either *Tangpap* or the *Sayang* ceremony, and this spirit structure is often found in villages, where the other great ceremonies are lacking.

SAYANG.—The greatest of all the ceremonies is the *Sayang*, the ability to celebrate which proclaims the family as one of wealth and importance. In most cases the right is hereditary, but, as already indicated, a person may gain the privilege by giving, in order, and through a term of years, all the minor ceremonies. In such circumstances *Sayang* follows *Kalangan* after a lapse of from four to eight years. Otherwise the ceremony will be held about once in seven years, or when the spirit structure known as *balaua* is in need of repairs.

Originally this appears to have been a seventeen-day ceremony, as it still is in Manabo, Patok, Lagangilang, and neighboring villages, but in San Juan, Lagayan, Danglas, and some other settlements it now lasts only five or seven days. However, even in those towns where it occupies full time, the first twelve days are preliminary in nature.

On the first day, the mediums go to the family dwelling and take great pains to see that all forbidden articles are removed, for wild ginger, peppers, shrimps, carabao flesh, and wild pork are tabooed, both during the ceremony and for the month following. The next duty is to construct a woven bamboo frame known as *talapitap* on which the spirits are fed, and to prepare two sticks known as *dakidak*, one being a thin slender bamboo called *bolo*, the other a reed. These are split at one end, so they will rattle when struck on the ground, and thus call the attention of the spirit for whom food is placed on the rack.

That evening a fire is built in the yard, and beside it the mediums dance *da-eng* alone. Meanwhile a number of women gather in the yard and pound rice out of the straw. This pounding of rice continues each evening of the first five days. The first night they beat out ten bundles, the second, twenty, and so on, until they clean fifty on the fifth day.

Little occurs during the second and third days, but on these evenings the young men and girls join the mediums and dance *da-eng* by

the fire in the yard. The fourth and fifth nights are known as *gīnītbet* ("dark"), for then no fires are lighted, and the mediums dance alone. It is supposed that the black spirits, those who are deformed, or who are too shy to appear before the people, will come out at this time and enjoy the ceremony.

Beginning with the sixth day the women pound rice in the early morning. Starting with ten bundles, they increase the number by ten each day until on the thirteenth morning they pound out eighty bundles. A fire is lighted in the yard on the sixth day, and is kept burning continuously through the eighth, but the ninth and tenth are nights of darkness. When the fire is burning, it is a sign for all who wish, to come and dance, and each evening finds a jolly party of young people gathered in the yard, where they take part in the festivities, or watch the mediums, as they offer rice to the superior beings.

On the eleventh day, a long white blanket (*tabing*) is stretched across one corner of the room, making a private compartment for the use of visiting spirits. That evening, as it grows dark, a jar of *basi* is carried up into the house. All lights are extinguished both in the yard and the dwelling, so that the guests have to grope their way about. After the liquor is consumed, they go down into the yard, where, in darkness, they join the medium in dancing *da-eng*. The twelfth day is known as *Pasa-ad*—"the building." During the preliminary days, the men have been bringing materials for use in constructing the great spirit-house called *balaua*, and on this morning the actual work is started. In form the *balaua* resembles the *kalangan*, but it is large enough to accommodate a dozen or more people, and the supporting posts are trunks of small trees (Plate XXI). After the framework is complete, one side of the roof is covered with cogon grass, but the other is left incomplete. Meanwhile the women gather near by and pound rice in the ceremonial manner described in the *Pala-an* ceremony (cf. p. 329).

As soon as the building is over for the day, a jar of *basi* is carried into the structure, a little of the liquor is poured into bamboo tubes and tied to each of the corner poles. The balance of the liquor is then served to the men who sit in the *balaua* and play on copper gongs. Next, a bound pig is brought in, and is tied to a post decorated with leaves and vines. Soon the medium appears, and after placing prepared betel-nut and lime on the animal, she squats beside it, dips her fingers into coconut oil, and strokes its side, then later dips a miniature head-axe into the oil, and again strokes the animal, while she repeats a *dīam*. This is a recital of how in ancient times Kadaklan and Agemen in-

structed the Tinguian as to the proper method of celebrating the *Sayang* ceremony.¹ A little later the pig is removed from the *balaua*, and its throat is cut, first with a metal blade, but the deep, mortal thrust is made with a bamboo spike. The animal is then singed, but its blood is carefully saved for future use (Plate XXXIII). While all this is taking place, the men in the *balaua* drink *basi* and sing *dalengs* in which they praise the liberality of their hosts, tell of the importance of the family, and express hope for their continued prosperity. As they sing, the chief medium goes from one to another of the guests, and after dipping a piece of lead in coconut oil, holds it to their nostrils as a protection against evil. When finally the pig has been singed and scraped, it is again brought into the *balaua*, and its body is opened by a transverse cut at the throat and two slits lengthwise of its abdomen. The intestines are removed and placed in a tray, but the liver is carefully examined for an omen. If the signs are favorable, the liver is cooked and is cut up, a part is eaten by the old men, and the balance is attached to the corner pole of the spirit structure. The head, one thigh, and two legs are laid on a crossbeam for the spirits, after which the balance of the meat is cooked and served with rice to the guests. That evening many friends gather in the yard to dance *da-eng*, to drink *basi*, or to sing *daleng*. According to tradition, it was formerly the custom to send golden betel-nuts to invite guests whom they wished especially to honor.² Nowadays one or more leading men from other villages may be especially invited by being presented with a bit of gold, a golden earring or bead. When such a one arrives at the edge of the yard, he is placed in a chair, is covered with a blanket, and is carried to the center of the dancing space by a number of women singing *dīwas* (cf. p. 452). At frequent intervals the merry-making is interrupted by one of the mediums who places the *talapitap* on the ground, puts rice and water on it, and then summons the spirits with the split sticks. Once during the evening, she places eight dishes and two coconut shells of water on the rack. Reaching into one of the dishes which contains rice, she takes out a handful and transfers it, a little at a time, into each of the others, then extracing a few grains from each, she throws it on the ground and sprinkles it with water from the two cups. The remaining rice is returned to the original holder, and the act is repeated eight times. The significance of this seems to be the same as in the *Tangpap* ceremony, where the life of

¹ See Traditions of the Tinguian, this volume, No. 1, p. 171.

² See *ibid.*, p. 24.

the individual is symbolized by the rice, which is only partially taken away and is again returned. The next act is always carried out, but its meaning appears to be lost. The eight dishes are filled with rice, and are placed on the frame together with sixteen coconut shells of water, and eight men and eight women seat themselves on opposite sides. First they eat a little of the food, then taking a small amount in their fingers, they dip it into the water and place it in the mouth of the person opposite.

The fourteenth day is known as *Palay-lay*—"the seasoning"—and during the next twenty-four hours the people remain quietly in the village while the bamboo used in the *balaua* "becomes good."

Next day is one of great activity. The roofing of the *balaua* is completed, all necessary repairs are made to the dwelling, for dire results would follow should any part of the house break through during the concluding days of the ceremony. The balance of the day is taken up in dancing and in the construction of the following spirit-houses: the *Aligang*, *Balabago*, *Talagan*, *Idasan*, *Balag*, *Batog*, *Alalot*, *Pangkew* and *Sogayob* (cf. pp. 308-311). Also a little bench is built near the hearth, and on it are placed coconut shell cups and drinks for the use of the Igorot spirits who usually come this night.

The evening of this day is known as *Libon*—"plenty" or "abundance." Toward nightfall the mediums, and their helpers enter the dwelling and decorate it in a manner already described for the great ceremonies. Cords cross the room from opposite corners and beneath, where they meet, the medium's mat is spread. On the cords are hung grasses, flowers, girdles, and wreaths of young coconut leaves. When all is ready, a small pig is brought into the room, while the men play frantically on their gongs and drums. On the medium's mat are many articles, *alangtin* leaves, a rooster, a branch filled with young betel-nuts, cooked rice moulded into the form of an alligator, but with a wax head and seeds for eyes, a spear, and a bundle of rice straw. Taking up a dish of water, the medium pours a part of it into the pig's ear; then, as the animal shakes its head, she again catches it in the dish. Rolling up a mat, she dips it into the water, and with it touches the heads of all members of the family, for in the same manner that the pig has thrown the water out of its ear, so in a like fashion will illness and misfortune be thrown from all the family who have been sprinkled with it. This act finished, the medium dances before the doors and windows, while she waves the chicken, betel-nuts, or other objects taken from the mat.

At her invitation, the host and his wife join her, but previously they have dressed themselves in good garments, and on their heads and at

their waists they wear girdles and wreaths of *alangtîn*, or wild grasses. The host is handed a long knife, and is instructed to cut the throat of the pig. His wife takes a rice winnower and a stick, and going to each window strikes the winnower five times, then drops it to the floor, at the same time crying, "Wa-hui." Next, she strikes a jar of liquor with the winnower, then shakes a coconut shell filled with rice against her abdomen; when finished she is handed a live chicken and again she approaches the jar. Soon she is joined by her husband, armed with a spear and head-axe. As he passes the liquor, he stamps on the ground, while his wife waves the fowl, and all this time the medium continues to sprinkle them with a grass brush dipped in water. No explanation is given for the individual acts, but the purpose of the whole is to drive away sickness, "just as the rooster flaps his wings." Ten dishes are placed on the spirit mat, and as the medium sings, she touches each one in turn with a split bamboo; after which she piles the dishes up and has the host come and squat over them three times. Another sprinkling with water follows this act, and then the medium swings a bundle of rice and a lighted torch over the head of each member of the family, while she assures them that all evil spirits will now depart.

The guests go down to the yard, where they are served with liquor, and where they dance *da-eng* and *tadek*. On all former occasions, the liquor has been served in shell cups, but on this night a sort of pan-pipe, made of bamboo tubes, is filled with liquor. The guest drinks from the lowest of the series, and as he does so, the liquor falls from one to another, so that he really drinks from all at one time. Bamboo tubes attached to poles by means of cords are likewise filled with *basi* and served to the dancers.

While the others are enjoying themselves, the mediums and the hosts are attending strictly to the business in hand. Dressed in their best garments, the husband and wife go to each one of the spirit houses, and touch them with their feet, a circuit which has to be repeated ten times. Each time as they pass the little porch-like addition, known as *sogayob*, the mediums sprinkle them with water. When they have completed their task, the mediums spread a mat in front of the pig, which lies below the *sogayob*, and on it they dance, pausing now and then to give the animal a vicious kick or to throw broken rice over it. And so the night is passed without sleep or rest for any of the principals in the ceremony.

The sixteenth day is *Kadaklan*,—"the greatest." Soon after day-break, the people accompany the medium to the guardian stones near

the gate of the village, and watch her in silence, while she anoints the head of each stone with oil, and places a new yellow bark band around its "neck." As soon as she finishes, the musicians begin to play vigorously on their gongs and drums, while two old men kill a small pig and collect its blood. The carcass is brought to the medium, who places it beside four dishes, one filled with *basi*, one with salt, one with vinegar, and the last with the pig's blood. She drinks of the liquor, dips her fingers in coconut oil, and strokes the pig's stomach, after which it is cut up in the usual manner. The liver is studied eagerly, for by the markings on it the fate of the host can be foretold. Should the signs be unfavorable, a chicken will be sacrificed in the hope that the additional offering may induce the spirits to change their verdict; but if the omens are good, the ceremony proceeds without a halt. The intestines and some pieces of meat are placed on the *ansi-silit*,—a small spirit frame or table near the stones. The host, who has been watching from a distance, is summoned, and is given a piece of the flesh to take back to his house for food, and then the rest of the meat is cooked and served to the guests. But before anything is eaten, the medium places prepared betel-nuts before the stones, mixes blood with rice, and scatters it broadcast, meanwhile calling the spirits from near and far to come and eat, and to go with her to the village, where she is to continue the ceremony. As the company approaches the *balaua*, the musicians begin to beat on their gongs, while women in the yard pound rice in ceremonial fashion. When they have finished, the family goes up into the *balaua* and dances to the music of the gongs until the medium bids them stop.

The pig which has been lying in front of the *sogayob*, and another from the yard, are killed, and are laid side by side near to the *balaua* in a spot indicated by the medium. She places a bamboo tube of water between them, on their backs she lays several pieces of prepared betel-nut, then strokes their sides with oiled fingers. Her next duty is to sprinkle *basi* from the jar onto the ground with a small head-axe, at the same time calling the spirits to come and drink. (Plate XXXIV). A bundle which has been lying beside the animals is opened, and from it the medium takes a red and yellow headband with chicken feathers attached, and boar's tusk armlets. These she places on the host, then hands him a blanket. Holding the latter in his outstretched arms, as he would do if dancing *tadek*, he squats repeatedly over a dish of water. As he finishes, the medium takes the tube of water from between the pigs, and pouring a little of it on her hand, she applies it to the abdomen of the man's wife and children.

The animals are now cooked in yard, while a quantity of rice is made ready in the house. During the preparation of the meal, the musicians play incessantly, but as the food is brought out, they cease and join the others in the feast.

It is late in the afternoon before much activity is again manifest. At first a few gather and begin to dance *tadek*; little by little others come in until by nightfall the yard is full. *Basi* is served to all, and soon, above the noisy laughter of the crowd, is heard the voice of some leading man singing the *daleng*. The visitors listen respectfully to the song and to the reply, then resume the music and dancing. After a time a huge fire is built in the yard, and by the flickering light two lines of boys and girls or older people will form to sing and dance the *laeng*.¹

On the morning of the seventeenth day, the men kill two pigs, usually by chasing them through the brush and spearing them to death. They are prepared in the usual way, and are placed, one in the *balaua*, the other in the *sogayob*, where they are cut up. A bit of the flesh is left in each structure, the fore half of one animal is carried into the yard, but the rest is prepared for food.

On an inverted rice-mortar, in the yard, is placed a jar of *basi*, notched chicken feathers, and boar's tusks. The man and his wife are summoned before this, are decorated as on the day before, and are instructed to dance three times around the mortar. While this is going on, a shield and a rice winnower are leaned against each other so as to form an arch on which lies a sheaf of rice. From the middle hangs a piece of burning wood, while over all a fish net is thrown. As in a former ceremony (cf. p. 347), the rice and fire represent the life of some member of the family, which the evil spirits may desire to seize, but they are prevented, since they are unable to pass through the meshes of the net. Going to the half of the pig, which stands upright in a rice winnower, the medium places a string of beads—agate and gold—around its neck and attaches bits of gold to its legs. Then she places a thin stick in each nostril and pumps them alternately up and down, as a smith would work his forge. After a little she removes the plungers, and with them strokes the bodies of members of the family. Near to the pig stands a dish of water in which the heart is lying. The host goes to this, removes the heart, and placing it on his head-axe, takes it in front of the animal, where it lies, while he pumps the nostril-sticks up and down ten times. Meanwhile his wife

¹ In Patok, *dīwas* is sung as a part of *da-eng* on the night of *Libon*.

is decorated with wreathes of leaves and vines; a leaf containing the pig's tail and some of the flesh is placed on her head, and a spear is put in her left hand. As her husband completes his task, she goes to the mortar, where she finds one dish full of blood and rice and the empty coconut shells. The rice and blood represent the lives of the family, and following the instructions of the medium, she takes these lives and places them little by little on the shells, but before all is gone, the medium bids her return them to the big dish. In a like manner the spirits may take a part of the life of the family, but will return it again. This act is repeated ten times. Next she takes a piece of woven bamboo, shaped like two triangles set end on end¹, and goes to the *batog*, where her daughter sits under a fish-net holding a similar "shield." They press these together, and the mother returns to the mortar eight times. The mediums who have gathered beneath the *sogayob* begin to sing, while one of them beats time with a split bamboo stick. At the conclusion of the song, one of them offers *basi* to the spirits and guests, and then placing a bundle of green leaves on the ground, she pours water over it, while the host and his wife are made to tramp in the mud. The man is now carrying the spear, while the woman holds a cock in one hand, and an empty dish in the other. As they are stamping on the damp leaves, old women stand near by showering them with rice and water.

Since early morning a dog has been tied at the end of the house. It is now brought up to the bundle of leaves, and is knocked on the head with a club, its throat is cut, and some of its blood is applied with a head-axe to the backs of the man and woman. More water is poured on the bundle, again they tramp in the mud, and again they are showered with rice and water. The man goes to one side of the *balaua*, and throws a bundle of rice over it to his wife, who returns it eight times.

A strange procession now forms and winds its way to the stream. In the lead is the host armed with spear, shield, and head-axe; next comes the medium carrying the bamboo rack—*talapitap*—like a shield, and the split bamboo—*dakidak*—as a spear; next is an old woman with a coconut shell dish, then another with a bundle of burning rice straw; behind her is the wife followed by a man who drags the dead dog. They stop outside of the village, while the medium hides the rack and split bamboo near the trail. Soon the man with the dog leaves the line and drags the animal to a distant tree, where he ties it in the

¹ This is the same form as the "shield," which hangs above the newborn infant (p. 312).

branches. As they arrive at the stream, the people pause, while the medium holds the shell cup beside the burning straw, and recites a *dīam*. The writer tried on two occasions to get this *dīam*, but it was given so low and indistinctly that its full content was not secured, neither was it possible to get the medium to repeat it after the ceremony. From what was heard it seems probable it is the *dawak dīam*,¹ a guess made more probable by the killing of the dog and the bathing which follows. As soon as the medium finishes, the whole party disrobes and bathes.

Upon their return to the village, they are met by a company of men and boys who assail them by throwing small green nuts. The host secures the spirit rack which the medium had hidden, and with it attempts to ward off the missiles. Despite this show of hostility, the company proceeds to the *sogayob*, where the man and his wife wash their faces in water containing pieces of coconut leaves. During all the morning a number of women have been preparing food, and this is now served to the guests, a considerable company of whom have collected. Late in the afternoon, all the spirits are remembered in a great offering of food. A framework is constructed in the yard,² and on it are placed eggs, meat, fish, rice cakes, sugar, betel-nut, tobacco, *basi*, and rice mixed with blood. After allowing the superior beings a few moments to finish their repast, the viands are removed, and from then until sunset all the guests dance *tadek*. As darkness comes, a great fire is lighted in the yard, and within the circle of its light the company gathers, while the more important men sing *daleng*.

In some of the villages men gather the next morning to do any necessary work on the *balaua*, and then the mediums celebrate the *dawak*,³ which always forms a part of this ceremony. In Manabo the *dawak* follows after an interval of three days.

This great and final event is so much like the procedure which makes up the *Tangpap* ceremony that it seems necessary to give it only in skeleton form, adding explanations whenever they appear to be necessary. In the *balaua* is spread a mat covered with gifts for the spirits who are expected. Here also is the spirit shield from the dwelling, and a great heap of refuse made up of the leaves, vines and other articles used in the preceding days.

¹ See Traditions of the Tinguian, this volume, No. 1, p. 177.

² On two occasions an old bedstead of Spanish type served instead of the frame.

³ See p. 315. In some towns the spirits are summoned at different times during the ceremony, as in *Tangpap*.

When all is ready, a medium seats herself by the mat, dips oil from a shallow dish with a small head-axe, and lets it drip onto the ground; then she does the same with *basi*, and finally strokes a rooster which lies beside the jar, all the while reciting the proper *diam*.

Taking the spirit shield, which belongs in the dwelling, she puts oil at each corner, and then touches the heads of all the family with it. Beads and betel-leaf are added, and the shield is carried to the house, where it is again fastened to the wall, as a testimony to all passing spirits that the ceremony has been made, and food provided for them.

The time has now arrived for the spirits to appear. Seating herself beside the mat, the medium strikes on a plate with her shells or a piece of lead, and then starts her song. She rubs her hands together with a revolving motion, swings her arms, and begins to tremble from head to foot. Suddenly she is possessed by a spirit, and under his direction holds oil to the nostrils of the host, and beats him with a small whip of braided betel-leaf. This done, she drinks for the spirit, and it departs. Again she sings, and again she is possessed. One spirit takes the rooster, and with its wings cleans up the rubbish in the *balaua* and in the yard, empties it in a tray, and orders it taken from the village. In the same way all sickness and misfortune will be removed from the settlement.

Several spirits follow, and as the morning wears on, the medium becomes more and more intense. The muscles of her neck and the veins of her forehead stand out like cords, while perspiration streams from her bod. Taking a shield and head-axe in her hand, she does a sort of muscle dance, then goes to each member of the family, and strikes the weapons together over their heads; from them she goes to the doors and windows, and strikes at them with the axe. Finally she returns to the mat, balances a cup of *basi* on the weapon, and causes the host to drink. Another attack on the doors follows, and then in exhaustion she sinks beside the mat. After a short rest, she dips beads in oil, and with them touches the heads of the family. The musicians strike up a lively tattoo at this point, and again seizing her weapons, the medium dances in front of the spirit shield. Going to the rooster on the mat, she cuts off a part of its comb, and presses the bloody fowl against the back or leg of each person in the room. The spirit drinks and disappears.

The next visitor dances with the host, and then wrestles with him, but upon getting the worst of the match takes leave. As in the *Tang-pap*, large number of minor beings call for a moment or two and

pass on. One spirit places the family beneath a blanket, cuts a coconut in two above their heads, and first allows the water to run over them; then finally the halves are allowed to drop. She waves burning rice-straw above them, and removes the blanket. It is explained that the water washes all evil away, and that as the shells fall from the family, so will sickness leave them. Evil spirits are afraid of the fire, and leave when the burning rice-straw is waved about the blanket.

As a final act the members of the family are instructed to hold, in their hands the head-axe, chicken feathers, agate beads, and other-articles, and then to mount the rice-mortar in the yard. Soon one or more of the mediums is possessed by spirits, who rush toward the mortar, and strive to seize the prized objects. Before they can accomplish their design, they are met by old men and women, who fight them off. At last they abandon the attempt and, together with the host and his wife, go to the edge of the town, where they pick sweet smelling leaves and vines. These they carry back to the village to give to the guests, and to place in the house and spirit dwellings.

As a final act *basi* is served to all, and *tadek* is danced until the guests are ready to return to their homes.

In San Juan they make the spirit raft—*taltalabong*—as in *Tangpap*, and set it afloat at sunset.

The mediums are paid off in rice, a portion of the slaughtered animals, beads, one or two blankets, and perhaps a weapon or piece of money.

During the succeeding month the family is prevented from doing any work, from approaching a dead body, or entering the house of death. Wild carabao, pig, beef, eels, and wild peppers may not be eaten during this period, and wild chickens are taboo for one year.

3. SPECIAL CEREMONIES

The two ceremonies which follow do not have a wide distribution, neither are they hereditary. They are given at this time because of their similarity to the great ceremonies just described.

PINASAL.—This rather elaborate rite seems to be confined to San Juan and nearby settlements. The right to it is not hereditary, and any one who can afford the expense involved may celebrate it. However, it usually follows the *Sayang*, if some member of the family is ill, and is not benefited by that ceremony, for "all the spirits are not present at each ceremony, and so it may be necessary to give others, until the one who caused the sickness is found."

On the first day the house is decorated as in *Tangpap* and *Sayang*; a bound pig is placed beside the door, and over it the mediums recite

a *diam* and later summon several spirits. Liquor is served to the guests, who dance *tadek* or sing songs in praise of the family.

Early the next day, the pig is killed and, after its intestines have been removed, it is covered with a colored blanket, and is carried into the dwelling. Here it is met by the mediums who wave rain coats above the animal, and then wail over the carcass. "The pig and its covering are in part payment for the life of the sick person. They cry for the pig, so they will not need to cry for the patient." Later the pig is cut up and prepared as food, only the head and feet being left for the spirits.

Gīpas, the dividing, follows. A Chinese jar is placed on its side, and on each end a spear is laid, so that they nearly meet above the center of the jar. Next a rolled mat is laid on the spears, and finally four beads and a headband are added. The mat then is cut through the middle, so as to leave equal parts of the headband and two beads on each half. "This shows that the spirit is now paid, and is separated from the house."

The next act is to stretch a rattan cord across the center of the room and to place on it many blankets and skirts. A man and a woman, who represent the good spirits *Iwaginán* and *Gimbagon*, are dressed in fine garments, and hold in their hands pieces of gold, a fine spear, and other prized articles. They are placed on one side of the cord, and in front of them stand a number of men with their hands on each others' shoulders. Now the mediums enter the other end of the room, spread a mat, and begin to summon the spirits. Soon they are possessed by evil beings who notice the couple representing the good spirits, and seizing sticks or other objects, rush toward them endeavoring to seize their wealth. When they reach the line of men, they strive to break through, but to no avail. Finally they give this up, but now attempt to seize the objects hanging on the line. Again they are thwarted. "If the evil spirits get these things, they will come often, their children will marry, and they also will harm the family; but if the good beings keep their wealth, their children will marry, and will aid the owner of the house."

Later one of the mediums and an old woman count the colors in a fine blanket. Usually there are five colors, so "the spirit is powerless to injure the people for five years." Next the couple gamble, but the medium always loses. Finally the spirit becomes discouraged and departs. The decorations are now taken from the room, and the sick person is carried down to the river by the members of the family. Arrived at the water's edge, the oldest relative will cut off a dog's

head as final payment for the life of the invalid. Since the act is carried on beside the river, the spirits will either witness the act, or see the blood as it floats away, and hence will not need to visit the town. The rattan cord and vines used in the dwelling are thrown onto the water for the same reason.

The whole family is covered with a large blanket, and a medium swings a coconut over them, then resting the halves on the head of each one for a moment, she releases them, meanwhile calling to the spirit, "You see this; this is your share; do not come any more." After assuring them that the sickness will now fall away from them, she waves burning *cogon* grass over their heads while she cries, "Go away, sickness." The blanket is removed, and the family bathes. While they are still in the water, the medium takes a spear and shield in her hands, and going to the edge of the stream, she begins to summon spirits, but all the while she keeps sharp watch of the old man who killed the dog, for he is now armed and appears to be her enemy. However, she is not molested until she starts toward the village. When quite near to the settlement, she is suddenly attacked by many people carrying banana stalks which they hurl at her. She succeeds in warding these off, but while she is thus engaged, an old man runs in and touches her with a spear. Immediately she falls as if dead, and it is several moments before she again regains consciousness. This attack is made to show the spirit how unwelcome it is, and in hopes that such bad treatment will induce it to stay away.

After the return of the family to the village, the guests drink *basi*, sing and dance, and usually several spirits are summoned by the mediums.

The next morning two *Pinalásang*¹ are constructed in the yard. Each supports a plate containing beads, a string of beads is suspended from one of the poles, and a jar of *basi* is placed beneath. In front of them the mediums call the spirits, then offer the heart, livers, and intestines, while they call out, "Take me and do not injure the people." The final act of the ceremony is to construct the spirit raft *taltalabong*, load it with food, and set it afloat on the river, "so that all the spirits may see and know what has been done."

In addition to the regular pay for their services, the mediums divide the jaw of a pig and carry the portions home with them, as their protection against lightning, and the spirits whose hostility they may have incurred.

¹ See under *Idasan*, p. 309.

BINIKWAU.—This ceremony, like the one just described, seems to be limited to the San Juan region, and is given under similar circumstances.

The room is decorated as usual, and a bound pig is laid in the center. This is known as "the exchange," since it is given in place of the patient's life. Two mediums place betel-nut on the animal, then stroke it with oil, saying, "You make the liver favorable," i. e., give a good omen. After a time they begin summoning the spirits, and from then until late evening the guests divide their time between the mediums and the liquor jars. Soon all are in a jovial mood, and before long are singing the praises of their hosts, or are greeting visiting spirits as old time friends.

The pig is killed early next morning, and its liver is eagerly examined to learn whether or no the patient is destined to recover. A part of the flesh is placed on the house rafters, for the use of the spirits, while the balance is cooked and served. Following the meal, the gongs and drums are brought up into the house, and the people dance or sing until the mediums appear, ready to summon the spirits. The first to come is Sabian, the guardian of the dogs. He demands that eight plates and a coconut shell be filled with blood and rice; another shell is to be filled with uncooked rice, in which a silver coin is hidden; and finally a bamboo dog-trough must be provided. When his demands are met, he begins to call, "Come, my dogs, come and eat." Later the blood and rice are placed in the trough, and are carried to the edge of the town, where they are left. This done, the spirit pierces the pig's liver with a spear and, placing it on a shield, dances about the room. Finally, stopping beside the mat, he lays them on the patient's stomach. The next and final act is to scrape up a little of the liver with a small head-axe, and to place this, mixed with oil, on the sick person.

On the third and last day, the medium leads a big dog to the edge of the village, and then kills it with a club. A piece of the animal's ear is cut off, is wrapped in a cloth, and is hung around the patient's neck as a protection against evil, and as a sign to all spirits that this ceremony has been held.

Throughout the rest of the day many spirits visit the mediums, and at such a time Kakalonan is sure to appear to give friendly advice. The final act is to set the spirit raft afloat on the stream.

VI. SOCIAL ORGANIZATION. GOVERNMENT.

THE VILLAGE

The village is the social unit within which there are no clans, no political, or other divisions. The Tinguian are familiar with the Igorot town, made up of several *ato*,¹ but there is no indication that they have ever had such an institution.

The head of the village is known as *lakay*. He is usually a man past middle age whose wealth and superior knowledge have given him the confidence of his people. He is chosen by the older men of the village, and holds his position for life unless he is removed for cause. It is possible that, at his death, his son may succeed him, but this is by no means certain.

The *lakay* is supposed to be well versed in the customs of the ancestors, and all matters of dispute or questions of policy are brought to him. If the case is one of special importance he will summon the other old men, who will deliberate and decide the question at issue. They have no means of enforcing their decisions other than the force of public opinion, but since an offender is ostracised, until he has met the conditions imposed by the elders, their authority is actually very great. Should a *lakay* deal unjustly with the people, or attempt to alter long established customs, he would be removed from office and another be selected in his stead. No salary or fees are connected with this office, the holder receiving his reward solely through the esteem in which he is held by his people.

In former times two or three villages would occasionally unite to form a loose union, the better to resist a powerful enemy, but with the coming of more peaceful times such beginnings of confederacies have vanished. During the Spanish regime attempts were made to organize the pagan communities and to give titles to their officers, but these efforts met with little success. Under American rule local self government, accompanied by several elective offices, has been established in many towns. The contest for office and government recognition of the officials is tending to break down the old system and to concentrate the power in the *presidente* or mayor.

It is probable that the early Tinguian settlement consisted of one

¹ Each with its dormitory for bachelors, and usually for unmarried girls. See JENKS, *The Bontoc Igorot*, p. 49 (Manila, 1905).

or more closely related groups. Even to-day the family ties are so strong that it was found possible, in compiling the genealogical tables, to trace back the family history five or six generations.

These families are not distinguished by any totems, guardian spirits, or stories of supernatural origin, but the right to conduct the more important ceremonies is hereditary. Descent is traced through both the male and female lines, and inheritance is likewise through both sexes. There are no distinguishing terms for relations on the father's or mother's side, nor are there other traces of matriarchal institutions.

Families of means attain a social standing above that of their less fortunate townsmen, but there is no sharp stratification of the community into noble and serf, such as was coming into vogue along many parts of the coast at the time of the Spanish conquest, neither has slavery ever gained a foothold with this people. The wealthy often loan rice to the poor, and exact usury of about fifty per cent. Payment is made in service during the period of planting and harvesting, so that the labor problem is, to a large extent, solved for the landholders. However, they customarily join the workers in the fields and take their share in all kinds of labor.

The concubines, known as *pota* (cf. p. 283), are deprived of certain rights, and they are held somewhat in contempt by the other women, but they are in no sense slaves. They may possess property, and their children may become leaders in Tinguian society.

The only group which is sharply separated from the mass is composed of the mediums, and they are distinctive only during the ceremonial periods. At other times they are treated in all respects as other members of the community.

On three occasions the writer has found men dressing like women, doing women's work, and spending their time with members of that sex. Information concerning these individuals has always come by accident, the people seeming to be exceedingly reticent to talk about them. In Plate XXXVI is shown a man in woman's dress, who has become an expert potter. The explanation given for the disavowal of his sex is that he donned women's clothes during the Spanish regime to escape road work, and has since then retained their garb. Equally unsatisfactory and unlikely reasons were advanced for the other cases mentioned.

It should be noted that similar individuals have been described from Zambales, Panay, from the Subanun of Mindanao, and from Borneo.¹ It has been suggested, with considerable probability, that

¹ COMBES, *Historia de las islas de Mindanao* (Madrid, 1667), translated by BLAIR and ROBERTSON, Vol. XL, p. 160; Vol. XLVII, p. 300. LING ROTH, *Natives of Sarawak and British North Borneo*, Vol. II, p. 270, *et seq.* (London, 1896).

at least a part of these are hermaphrodites, but in Borneo, where they act as priests, ROTH states that they are unsexed before assuming their roles.

LAWS.—Law, government, and custom are synonymous. Whatever the ancestors did is right, and hence has religious sanction. The *lakay* and his advisors will give their decisions according to the decrees of the past, if that is possible, but when precedent is lacking, they will deliberate and decide on a course. The following may be taken as typical of the laws or customs which regulate the actions of the people, within a group, toward one another.

Rules governing the family.—A man may have only one wife, but he may keep concubines. If the wife's relatives suspect that a mistress is causing the husband's affections to wane, they may hold the *Nag-kakalonan* or "trial of affection" (cf. p. 282), and if their charges are sustained, the husband must pay them a considerable amount, and, in addition, stand all the expenses of the gathering. If it is shown that they are not justified in their suspicions, the expense falls on the accusers.

The wife may bring a charge of cruelty or laziness against her husband, and if it is substantiated, he will be compelled to complete the marriage agreement and give the woman her freedom. Unfaithfulness on the part of a wife, or a betrothed girl, justifies the aggrieved in killing one or both of the offenders. He may, however, be satisfied by having the marriage gift returned to him, together with a fine and a decree of divorce.

A man who has a child by an unmarried woman, not a *pota*, must give the girl's people about one hundred pesos, and must support the infant. Later the child comes into his keeping, and is recognized as an heir to his estate.

Marriage is prohibited between cousins, between a man and his adopted sister, his sister-in-law, or mother-in-law. Union with a second cousin is also tabooed. It is said that offenders would be cut off from the village; no one would associate with them, and their children would be disinherited.

A widow may remarry after the *Layog* ceremony (cf. p. 290), but all the property of her first husband goes to his children.

If a wife has neglected her husband during his final illness, she may be compelled to remain under two blankets, while the body is in the house (cf. p. 286), unless she pays a fine of ten or fifteen pesos to his family.

Children must care for and support infirm parents. Should there be no children, this duty falls upon the nearest relative.

Inheritance.—Although a price is paid for the bride, the Tinguian woman is in no sense a slave. She may inherit property from her parents, hold it through life, and pass it on to her children.

Following the death of a man, enough is taken from his estate to pay up any part of the marriage agreement which may still be due, and the balance is divided among his children. If there are no children, it is probable that his personal possessions will go to his father or mother, if they are still living; otherwise, to his brothers and sisters. However, the old men in council may decide that the wife is entitled to a share. Should she remarry and bear children to her second husband, she cannot give any part of this property to them, but upon her death it goes to the offspring of the first marriage, or reverts to the relatives. Land is divided about equally between boys and girls, but the boys receive the major part of the animals, and the girls their mother's beads. Oftentimes the old men will give the oldest child the largest share, "since he has helped his parents longest."

Whatever the husband and wife have accumulated in common during their married life is divided, and the man's portion is disposed of, as just indicated. Illegitimate children and those of a *pota* receive a share of their father's property, but not in the same proportion as the children of the wife. No part of the estate goes to a concubine unless, in the judgment of the old men, it is necessary to provide for her, because of sickness or infirmity.

Transfer and sharing of property.—Land and houses are seldom transferred, except at the death of the owner, but should a sale or trade be desired, the parties to the contract will make the bargain before the *lakay* and old men, who thus become witnesses. A feast is given at such a time, and is paid for by either the seller or the buyer. The sale or barter of carabao, horses, valuable jars, and beads may be witnessed in this manner, but the transfer of personal property is purely a matter between the parties concerned.

If a man works the property of another, he furnishes the seed and labor, and the crop is divided. If an owner places his animals in the care of another, the first of the increase goes to him, the second to the caretaker. Should an animal die, the caretaker must skin it, and give the hide to the owner, after which he is freed from responsibility, but he is liable for the loss, theft, or injury to his charges.

Murder and Theft.—The relatives of a murdered man may kill his assailant without fear of punishment, but, if they are willing, the

guilty party may settle with them by paying in Chinese jars, carabao, or money. The usual payment varies from fifty to one hundred pesos. A thief is compelled to make restitution, and is also subject to a small fine.

The practice of evil magic, and the breaking of a taboo, are considered serious crimes, but as they have been treated under Religion and Magic, they will not be repeated here.

Lying, Cheating, Breaches of Etiquette.—Falling outside the realm of law are those things which may be considered right and wrong, but the infraction of which carries with it no penalty. Lying, for instance, is not bad, if it is done to protect yourself or a friend, but falsifying without purpose is mean and to be despised. Cheating is not wrong. Your ability to outwit the other person is proof that you are the smarter man.

It is bad manners for a man to sit with his legs far apart or to expose all of his clout, or for a woman to sit on the floor with one leg drawn up. A person should not walk about while others are singing or dancing. Basi should never be drunk, until it has been offered to every one present, especially the elders.

Before eating, a person should invite all in the room to join him, even though he does not expect them to accept. A visitor should never eat with the wife of another during his absence.

Always call before entering a house. Never enter a dwelling, when the owner is away, and has removed the ladder from the door. Never enter a village dirty; stop and bathe at the spring before going up. Only dogs enter the houses without bathing.

THE VILLAGE (Plate XXXVIII).—A village generally consists of two or three settlements, situated near together, and under the authority of a single *lakay* or headman. There is no plan or set arrangement for the dwellings or other structures, but, as a rule, the house, spirit structure, and perhaps corrals are clustered closely together, while at the edge of the settlement are the rice granaries and garden plots. Formerly a double bamboo stockade surrounded each settlement, but in recent years these have disappeared, and at the time of our visit only one town, Abang, was so protected.

The dwellings vary in size and shape. They conform in general to two types. The first and most common is a single room with a door at one end opening off from an uncovered porch (Plate XXXIX). The second consists of three rooms, or rather two rooms, between which is a porch or entry way, all under one roof. There is seldom an outer door to this entry way, but each room has its own door, and

oftentimes windows opening on to it, so that one has the feeling that we have here two houses joined by the covered porch. In such buildings this entry way is a convenient place for hanging nets or for drying tobacco.

In one room is the hearth, the water pots, and dishes, while the other is the family sleeping-room.

The construction of the dwelling is shown in Plates XL-XLI. A number of heavy hard-wood posts are sunk deeply into the ground and project upward 10 or more feet. At a height of 4 or 5 feet above the ground, crossbeams are lashed or pegged to form the floor supports, while at the tops are other beams on which the roof rests. Plate XL shows the skeleton of this roof so plainly that further description is unnecessary. This framework, generally constructed on the ground, is raised on to the upright timbers, and is lashed in place. A closely woven mat of bamboo strips, or of bamboo beaten flat, covers each side of the roof, and on this the thatch is laid. Bundles of *cogon* grass are spread clear across the roof, a strip of bamboo is laid at the upper ends, and is lashed to the mat below. A second row of thatch overlaps the top of the first, and thus a waterproof covering is provided.

Another type of roofing is made by splitting long bamboo poles, removing the sectional divisions and then lashing them to the framework. The first set is placed with the concave sides up, and runs from the ridge pole to a point a few inches below the framework, so as to overhang it somewhat. A second series of halved bamboos is laid convex side up, the edges resting in the concavity of those below, thus making an arrangement similar to a tiled roof.

For the side walls this tiled type of construction is commonly used (Plate LXXVIII). A coarse bamboo mat is likewise employed, while a crude interweaving of bamboo strips is by no means uncommon. Such a wall affords little protection against a driving rain or wind, but the others are quite effective. Well-to-do families often have the side walls and floors of their houses made of hard-wood boards. Since planks are, or have been until recently, cut out with knives, head-axes, or adzes, much time and wealth is consumed in constructing such a dwelling. When completed, it is less well adapted to the needs of the people than the structures just described, but its possession is a source of gratification to the owner, and aids in establishing him as a man of affairs in his town.

The floor is made of poles tied to the side-beams, and on these strips of bamboo are laid so as to leave small cracks between them. This assists in the house-cleaning, as all dirt and refuse is swept

through the openings on to the ground. When the floor is made of wood, it is customary to leave one corner to be finished off in the bamboo slits, and it is here that the mother gives birth to her children. This is not compulsory, but it is custom, and indicates clearly that the planked floor is a recent introduction.

Entrance to the dwelling is by means of a bamboo ladder which is raised at night, or when the family is away. Windows are merely square holes over which a bamboo mat is fitted at night, but the door is a bamboo-covered framework which turns in wooden sockets.

Such a house offers no barriers to mosquitoes, flies, flying roaches, or white ants, while rats, scorpions, and centipedes find friendly shelter in the thatch roof. Quite commonly large but harmless snakes are encouraged to take up their residence in the cook room, as their presence induces the rats to move elsewhere. Little house lizards are always present, and not infrequently a large lizard makes its home on the ridge pole, and from time to time gives its weird cry.

The ground beneath the house is often enclosed with bamboo slats, and is used for storage purposes, or a portion may be used as a chicken coop. It is also customary to bury the dead beneath the dwelling, and above the grave are the boxes in which are placed supplies for the spirits of the deceased.

With some modification this description of the Tinguian house and village would apply to those of the western Kalinga and the Apayao,¹ and likewise the Christian natives of the coast, but a very different type of dwelling and grouping is found among the neighboring Igorot.² It is also to be noted that we do not find to-day any trace of tree dwellings, such as were described by LA GIRONIÈRE³ at the time of his visit scarcely a century ago. Elevated watch-houses are placed near to the mountain fields, and it is possible that in times of great danger people might have had similar places of refuge in or near to their villages, but the old men emphatically deny that they were ever tree-dwellers, and there is nothing in the folk-tales to justify such a belief; on the contrary, the tales indicate that the type of dwelling found to-day, was that of former times.⁴

HOUSE FURNISHINGS.—The average house has only one room. Inside the door, at the left, one usually finds the stove, three stones sunk in a box of ashes or dirt, or a similar device of clay (Fig 5,

¹For description of these villages, see COLE, *Distribution of the Non-Christian Tribes of Northwestern Luzon* (*Am. Anthropologist*, Vol. XI, p. 329).

²See JENKS, *The Bontoc Igorot* (Manila, 1906).

³Twenty years in the Philippines, p. 109 (London, 1853).

⁴See Traditions of the Tinguian, this volume, No. 1, p. 8.

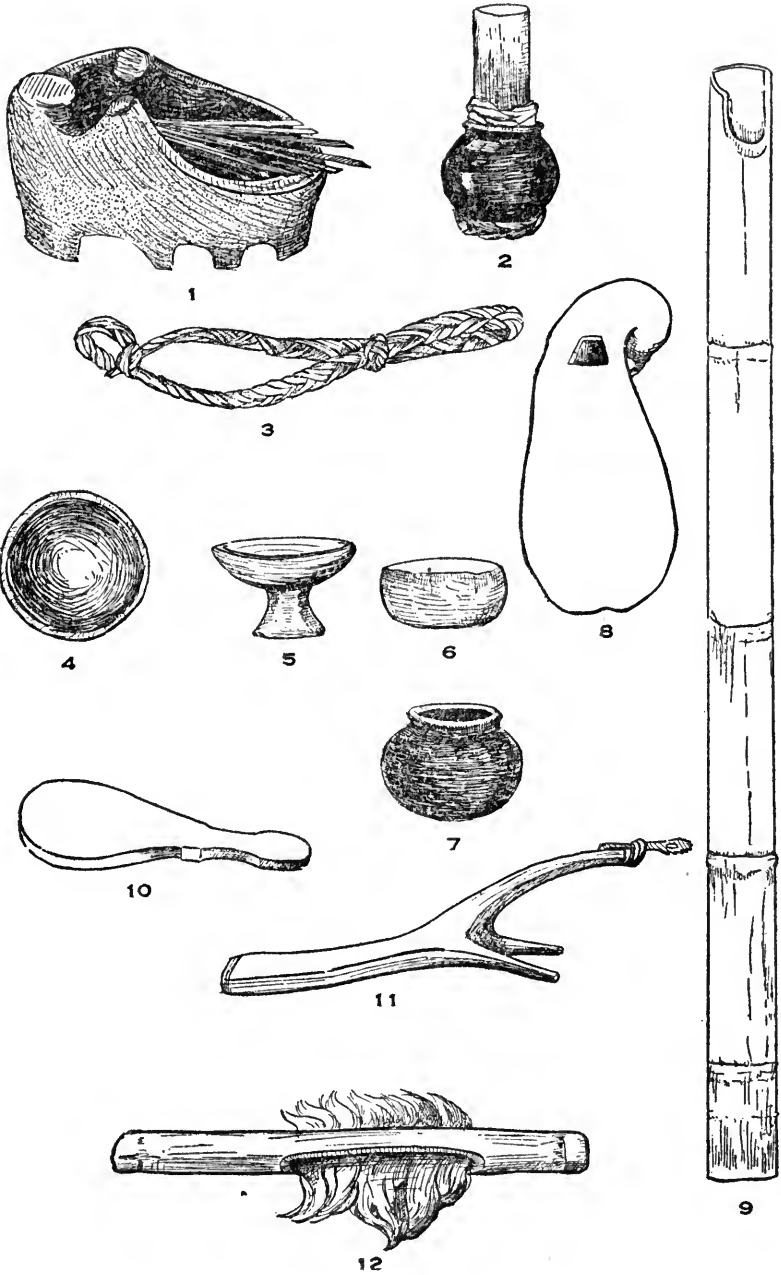


FIG. 5.
HOUSEHOLD OBJECTS.

No. 1). Above the fire is suspended a hanger on which are placed dishes and food, in order that they may not be disturbed by insects. Along the wall stands a small caldron, jars for water and rice, and the large Chinese jars, the latter as a general rule heirlooms or marriage gifts. These are sometimes used for *basi*, but more often they contain broken rice, cotton, or small articles. Above the jars is a rack or hangar on which dishes or coconut shells are placed. At one end of the room a set of pegs, deer horns, or a cord supports a variety of clothes, blankets, a woman's switch, and perhaps a man's belt. The sleeping-mats either hang here or occupy a rack of their own. Below the cord stand chests secured in early years through trade with the Chinese. In these are the family treasures, valuable beads, coins, blankets, ceremonial objects, and the like. Piled on the boxes is a variety of pillows, for no Tinguian house is complete without a number of these (Plate LXVI). The other house furnishings, consisting of a spinning wheel, loom, coconut rasp, and clothes beater (Fig. 5, No. 10) find space along the other wall. Behind the door, except in the valley towns, stand the man's spear and shield; above or near the door will be the spirit offering in the form of a small hanger or a miniature shield fastened against the wall. The center of the floor affords a place for working, eating, and sleeping. If there are small children in the family a cradle or jumper will be found suspended from a beam or a bamboo pole placed across one corner of the room (cf. p. 272).

The type of jars made by the Tinguian is shown in Fig. 5, No. 7, while those of foreign introduction have been fully described in a previous publication.¹

The native jars are used both for cooking and as water containers. With them will be found pot rings and lifters. The first is a simple ring of plaited bamboo, which fits on the head or sets on the floor, and forms a support for the rounded bottom of the jar. The second (Figure 5, No. 3) consists of a large rattan loop, which is placed over the neck of the jar. The hands are drawn apart, and the weight closes the loop, causing it to grip the jar. Long bamboo tubes with sections removed are used as water containers, while smaller sections often serve as cups or dippers. Gourds are also used in this manner (Fig. 5, Nos. 8-9).

Food is removed from the jars with spoons and ladles (Fig. 6) made of wood or coconut shells, but they are never put to the mouth.

¹See COLE and LAUFER, Chinese Pottery in the Philippines (Field Museum of Natural History, Vol. XII, No. 1).

Meat is cut up into small pieces, and is served in its own juice. The diner takes a little cooked rice in his fingers, and with this dips or scoops the meat and broth into his mouth. Greens are eaten in the same manner.

Halved coconut shells serve both as cups and as dishes (Fig. 5, No. 6). Wooden dishes are likewise used, but they are employed chiefly in ceremonies for the feeding of the spirits or to hold the rice from which a bride and groom receive the augury of the future (Fig. 5, Nos. 4-5).

Baskets, varying considerably in material, size and type, are much used, and are often scattered about the dwelling or, as in the case of the men's carrying baskets, are hung on pegs set into the walls.

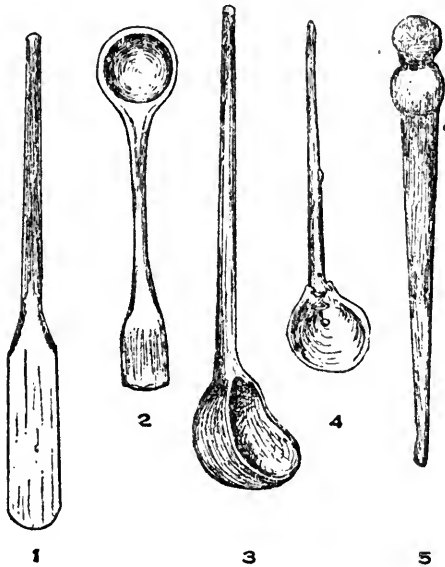


FIG. 6.
SPOONS AND LADLES.

Somewhere about the house will be found a coconut rasp (Fig. 5, No. 11). When this is used, the operator kneels on the wooden standard, and draws the half coconut toward her over the teeth of the blade. The inside of the shell is thus cleaned and prepared for use as an eating or drinking dish. Torches or bamboo lamps formerly supplied the dwellings with light. Lamps consisting of a section of bamboo filled with oil and fitted with a cord wick are still in use, but for the most part they have been superseded by tin lamps of Chinese

manufacture. Oil for them is extracted from crushed seeds of the *tau-tau* (*Jatropha grandulifera* Roxb.)

A very necessary article of house furnishing is the fire-making device. In many instances, the housewife will go to a neighboring dwelling and borrow a light rather than go to the trouble of building a fire, but if that is not convenient, a light may be secured by one or two methods. The first is by flint and steel, a method which is probably of comparatively recent introduction. The second and older is one which the Tinguian shares with all the neighboring tribes. Two notches are cut through a section of bamboo, and tree cotton is placed below them. A second section of bamboo is cut to a sharp edge, and this is rubbed rapidly back and forth in the notches until the friction produces a spark, which when caught on tinder can be blown into a flame.¹ At the door of the house will be found a foot wiper (Fig. 5, No. 12) made of rice-straw drawn through an opening cut in a stick, or it may consist of coconut husks fastened together to make a crude mat, while near by is the broom made of rice-straw or grass. Rice-mortars, pestles, and similar objects are found beneath the dwellings.

THE VILLAGE SPRING.—Each village is situated near to a spring or on the banks of a stream. In the latter case deep holes are dug in the sands, and the water that seeps in is used for household purposes. In the morning, a number of women and girls gather at the springs, carrying with them the plates and dishes used in the meals, also garments which need to be laundered. The pots and dishes are thoroughly scoured with sand and water, applied with a bundle of rice-straw or grass. The garments to be washed are laid in the water, generally in a little pool near to the main spring or beside the stream. Ashes from rice-straw are then mixed with water and, after being strained through a bunch of grass, are applied to the cloth in place of soap. After being thoroughly soaked, the cloth is laid on a clean stone, and is beaten with a stick or wooden paddle. The garment is again rinsed, and later is hung up on the fence near the dwelling to dry.

Before returning to her home, the woman fills her pots with water, and then takes her bath in a pool below the main spring (Plate XLII). All garments are removed except the girdle and clout, and then water, dipped up in a coconut shell, is poured on to the face, shoulders, and body. In some cases sand is applied to the body, and is rubbed in with the hand or a stone; rinsing water is applied and the garments

¹ Despite frequent assertions to the contrary, the fire syringe is not used by the Tinguian. It is found among the Tiagan Igorot, the similarity of whose name has doubtless given rise to the error.

are put back on without drying the body. Every one, men, women, and children, takes a daily bath, and visitors will always stop to bathe at the spring or river before entering a village. Promiscuous bathing is common, and is accepted as a matter of course, but there is no indication of embarrassment or self-consciousness. When she returns to the village, the woman will often be seen carrying one or two jars of water on her head, her washing under her arm, while a child sets astride her hip or lies against her back (Plate XLIII).

VII. WARFARE, HUNTING, AND FISHING

Head-hunting and warfare are practically synonymous. To-day both are suffering a rapid decline, and a head is seldom taken in the valley of the Abra. In the mountain district old feuds are still maintained, and sometimes lead to a killing, and here too the ancient funerary rites are still carried out in their entirety on rare occasions. However, this peaceful condition is not of long standing. In every village the older men tell with pride of their youthful exploits, of the raids they indulged in, the heads they captured; and they are still held in high esteem as men "who fought in the villages of their enemies."

During the time of our stay in Abra, the villages of the Buklok valley were on bad terms with the people of the neighboring Ikmin valley, and were openly hostile to the Igorot on the eastern side of the mountain range. Manabo and Abang were likewise hostile to their Igorot neighbors, and the latter village was surrounded with a double bamboo stockade, to guard against a surprise attack. Manabo at this time anticipated trouble with the warriors of Balatok and Besao, as a result of their having killed six men from those towns. The victims had ostensibly come down to the Abra river to fish, but, judging by previous experience, the Tinguian believed them to be in search of heads, and acted accordingly. This feud is of old standing and appears to have grown out of a dispute over the hunting grounds on Mt. Posoey, the great peak which rises only a few miles from Manabo. There have been many clashes between the rival hunters, the most serious of which occurred in 1889, when the Tinguian had twenty-nine of their number killed, and lost twenty-five heads to the Igorot of Besao.

The people of Agsimo and Balantai suffered defeat in a raid carried on against Dagara in 1907, and at the time of our visit a number of the warriors still bore open wounds received in that fight. In the same year at least three unsuccessful attacks, probably by lone warriors, were made against individuals of Lagangilang, Likuan, and Lakub.

Accounts of earlier travelers offer undoubted proof that head-hunting was rampant a generation ago; while the folk-tales feature the taking of heads as one of the most important events in Tinguian life.

The first incentive for head-taking is in connection with funeral rites. According to ancient custom it was necessary, following the death of an adult, for the men of the village to go out on a head-hunt, and until they had done so, the relatives of the deceased were barred from wearing good clothing, from taking part in any pastimes or festivals, and their food was of the poorest and meanest quality. To remove this ban, the warriors would don white head-bands, arm themselves, and sally forth either to attack a hostile village or to ambush an unsuspecting foe. Neighboring villages were, out of necessity, usually on good terms, but friendly relations seldom extended beyond the second or third settlement, a distance of ten or fifteen miles. Beyond these limits most of the people were considered enemies and subject to attack.

While such a raid was both justifiable and necessary to the village in which a death had occurred, it was considered an unprovoked attack by the raided settlement; a challenge and an insult which had to be avenged. Thus feuds were established, some of which ran through many years, and resulted in considerable loss of life. A town, which had lost to another a greater number of heads than they had secured, was in honor bound to even the score, and thus another cause for battle was furnished. The man who actually succeeded in taking a head was received with great acclaim upon his return to the village; he was the hero in the festival which followed, and thereafter was held in high esteem, and so another motive was furnished.¹

There is an indication in the *Saloko* ceremony that heads may have been taken to cure headache and similar ills (cf. p. 319); while the presence of the head-basket, of the same name, in the fields suggests a possible connection between head-hunting and the rice culture, such as still exists among the neighboring Kalinga.²

The Tinguian do not now, and apparently never have practised human sacrifice, but this custom and head-hunting seem to be closely related, and to have as a primary cause the desire to furnish slaves or companions for the dead. This idea was found among the ancient Tagalog, Visayan, and Zambal, and still exists among the Apayao of Northern Luzon; the Bagobo, Mandaya, Bila-an, and Tagakaola of

¹ Head-hunting is widespread in this part of the world. It is found in Assam, in the Solomon Islands, in Borneo, Formosa, and, it is said, was formerly practiced in Japan. See HOBSON (*Folklore*, June, 1909, p. 109); RIVERS, *History of Melanesian Society*, Vol. II, p. 259 (Cambridge, 1914); HOSE and McDUGALL, *Pagan Tribes of Borneo*, Vols. I-II (London, 1912); SHINJI ISHII (*Transactions Japan Soc. of London*, Vol. XIV, pp. 7, *et seq.*).

² See WORCESTER, *The Non-Christian Tribes of Northern Luzon* (*Philippine Journal of Science*, Vol. I, p. 824, Manila, 1906).

Mindanao; as well as in Borneo and the islands to the south.¹ That it once had a strong hold on the Ilocano of the coast is made evident by the mysterious cult known as *axibrong*, which at times terrifies whole communities. In 1907 the region about Bangui, in Ilocos Norte, was greatly excited over several attempts to kill people of that settlement, and it was whispered that when a leading man, who had recently died, was placed in his coffin, his right hand had suddenly raised up with four fingers extended. This, it was said, was a demand on the part of the dead for four companions, and the subsequent attacks on the villagers were thought to be due to the activities of the bereaved family in complying with the wishes of the deceased.

The raids following a death were usually carried out as a village affair, and many warriors participated, but it seems that by far the greater number of heads were secured by individuals or couples, who would lie in ambush near to the trails, or to the places, where the women had to pass in carrying water from the streams to the village.

While the Tinguian always chose to attack from ambush, yet he did not hesitate to fight in the open when occasion demanded it. For a distance of fifteen or twenty feet he depended on his spear, but for close quarters he relied on his shield and head-axe. An examination of Plate XLIV will show that the shield has three prongs at the top. These the warrior seeks to slip between the legs of his enemy to trip him up, then one stroke downward with the axe, and the opponent is put out of the fight. The two lower prongs are meant to be slipped about the neck. One more stroke of the head-axe, and the victor takes his trophy and starts for home, while the relatives of the dead man seek to secure the remains to carry them back to their village. As the loss of a head reflects on the whole party, and in a like manner its acquisition adds distinction to the victors, a hot fight usually develops over a man who is stricken down, and only ceases when the enemy is beaten off, or has been successful in getting away with the trophy.

If a war party finds it necessary to make a night camp, or if they are hard pressed by the foe, they plant long, thin strips of bamboo or *palma brava*² in the grass. The ends of these are cut to sharp points, and they are so cleverly concealed that pursuers must use great care.

¹ See BLAIR and ROBERTSON, *The Philippine Islands*, Vols. V, p. 137; XXI, p. 140; XXXIV, p. 377; XL, pp. 80-81; XLVII, p. 313; XLVIII, p. 57. COLE, *Distribution of the Non-Christian Tribes of Northwestern Luzon* (*Am. Anth.*, N. S., Vol. XI, 1909, p. 340); COLE, *The Wild Tribes of Davao District, Mindanao* (pub. Field Museum of Natural History, Vol. XII No. 2, p. 114, *et seq.*).

² These are called *soga*. Their use is widespread in the Philippines, in Malaysia generally, and even extends into upper Burma. See SHAKESPEAR, *History of Upper Assam, Upper Burmah and Northeastern Frontier*, pp. 186, *et seq.* (London, 1914). MARSDEN, *Hist. of Sumatra*, p. 310 (London, 1811).

and consequently lose much time, or they will have their legs and feet pierced with these needle-like blades.

Upon their return to the village, the warriors were formerly met at the gate by their relatives, who held two ladders in A shape, thus forming a pathway over which each had to climb. Once inside the town, the heads were placed on a bamboo spike known as *sagang* (cf. p. 310), or in the *saloko* (cf. p. 310), and for three days were exhibited beside the gate. In the meantime messages were sent to friendly villages to invite the people to the celebration.

On the morning of the last day, the heads were carried up to the center of the village, where, amid great rejoicing, the men sang the praises of the victors or examined the skulls of the victims. Sometime during the morning, the men who had taken the heads split them open with their axes and removed the brains. To these they added the lobes of the ears and joints of the little fingers, and they placed the whole in the liquor which was afterwards served to the dancers. There seems to be no idea here of eating the brains of the slain as food. They are consumed solely to secure a part of their valor, an idea widespread among the tribes of Mindanao.¹ The writer does not believe that any people of the Philippines indulges in cannibalism, if that term is used to signify the eating of human flesh as food. Several, like the Tinguian, have or still do eat a portion of the brain, the heart or liver of brave warriors, but always, it appears, with the idea of gaining the valor, or other desirable qualities of the victims.

The balance of the head festival consisted in the drinking of sugar cane rum, of songs of praise by the headmen, and finally all joined in dancing *da-eng*. Just before the guests were ready to depart, the skulls were broken into small bits, and the fragments were distributed to the guests so that they might take them to their homes, and thus be reminded of the valor of the takers.² This disposition of the skull agrees with that of many Apayao towns,³ but it does not conform with the description of ancient times afforded us in the tales,⁴ nor

¹ See COLE, Wild Tribes of Davao District (Field Museum of Nat. Hist., Vol. XII, No. 2, p. 94).

² This description is partially taken from the account of PAUL P. DE LA GIRONTIÈRE, probably the one white man, who has witnessed this rite (see *Twenty Years in the Philippines*, p. 108, London, 1853), and from the stories of many old men, who themselves have participated in the head-hunts and subsequent celebrations.

³ See COLE, Distribution of the Non-Christian Tribes of Northwestern Luzon (*Am. Anthropologist*, N. S., Vol. XI, No. 3, 1909, p. 340).

⁴ Traditions of the Tinguian, this volume, No. 1, p. 22.

with the practices of the Kalinga and Igorot people, both of whom preserve the trophy.

The weapons of the warriors consists of a spear, head-axe, and shield, and the small bamboo spikes known as *soga*. They do not make use of the bow and arrow, although they have been credited as possessing them.¹ The old men claim it has not been used in their lifetime, nor is mention made of it in the folk-tales. The only time it appears is in the crude weapons used in shooting fish in the rice-fields, and in the miniature bow and arrow, which hang above the heads of a newborn child.

Bolos, or long knives, are carried at the side suspended from the

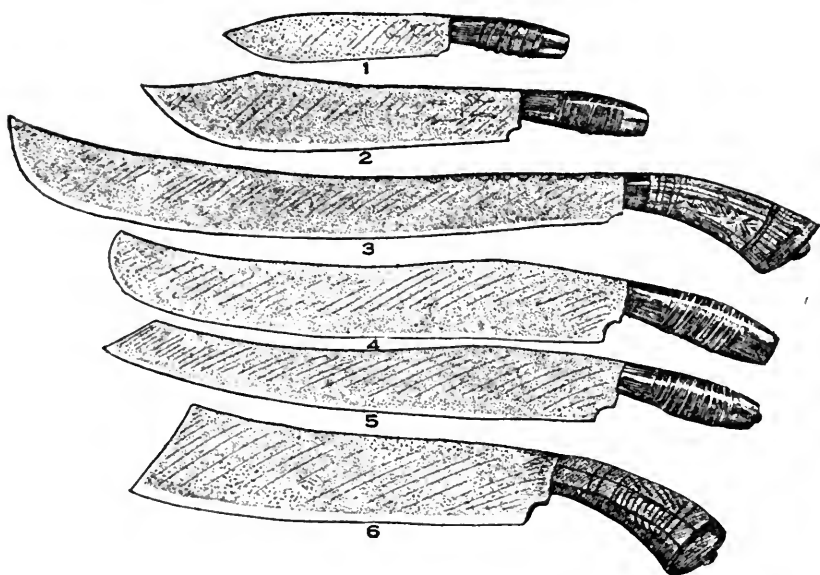


FIG. 7.
TYPES OF KNIVES.

belt, and upon occasion may be used as weapons. However, they are generally considered as tools (Fig. 7).

THE HEAD-AXE, *aliwa* or *gaman* (see Fig. 8).—The axes made by the Tinguian and Kalinga are identical, probably due to the fact that the center of distribution, as well as the best iron work of this region, is found in Balbalasang—a town of mixed Tinguian and Kalinga blood. The blade is long and slender with a crescent-shape cutting

¹ JENKS, *The Bontoc Igorot*, p. 123 (Manila, 1905); KROEBER, *The Peoples of the Philippines* (Am. Museum Nat. Hist., Handbook Series, No. 3, p. 165, New York, 1919).

edge on one end, and a long projecting spine on the other. This projection is strictly utilitarian. It is driven into the ground so as to support the blade upright, when it is desired to have both hands free to draw meat or other articles over the cutting edge. It is also driven into

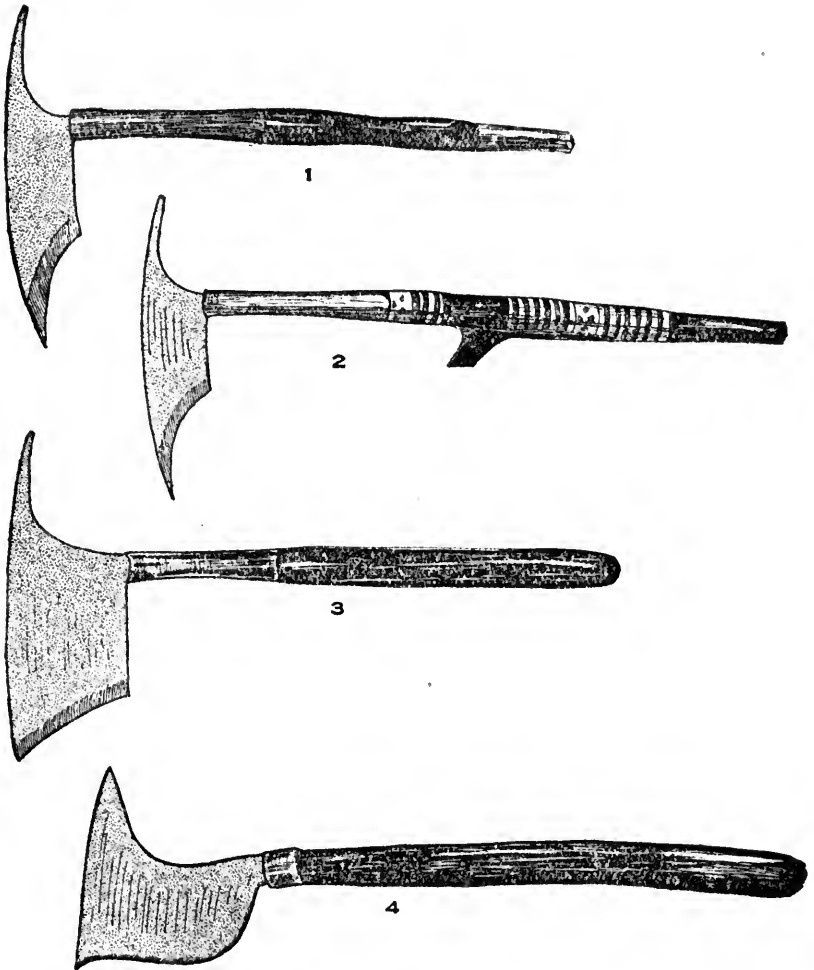


FIG. 8.
HEAD-AXES.

the soil, and acts as a support when its owner is climbing steep or slippery banks.

The blade fits into a long steel ferrule which, in turn, slips onto a wooden handle. The latter may be straight or plain, but commonly

it has a short projection midway of its length, which serves as a finger-hold and as a hook for attachment to the belt. Quite frequently the handle is decorated with thin circles or bands of brass, while ornamental designs sometimes appear on the blade.

While the axe is primarily a weapon, its use is by no means confined to warfare. It is used in house and fence building, in cutting up game and forest products, and in many other ways. Fig. 8 shows three types of head-axes, the first two, the Tinguian-Kalinga axe; third, the Igorot; fourth, the Apayao. There is a noticeable difference between the slender blades of the first group and the short, thick blade of the Igorot, yet they are of the same general type. The Apayao weapon, on the other hand, presents a radical difference in form. Despite these variations, the axes of these three tribes present an interesting problem. So far as it is known, these are the only tribes in the Philippines which make use of a head-axe, and it is believed that no similar weapon is found in the Malayan Islands. However, blades of striking resemblance do occur among the Naga of Assam.¹ It is possible that the weapons of these far separated regions may hark back to a common source, from which they received their instruction in iron working.

THE SPEAR, *pika*.—The various types of spears used by the Tinguian are shown in Fig. 9.

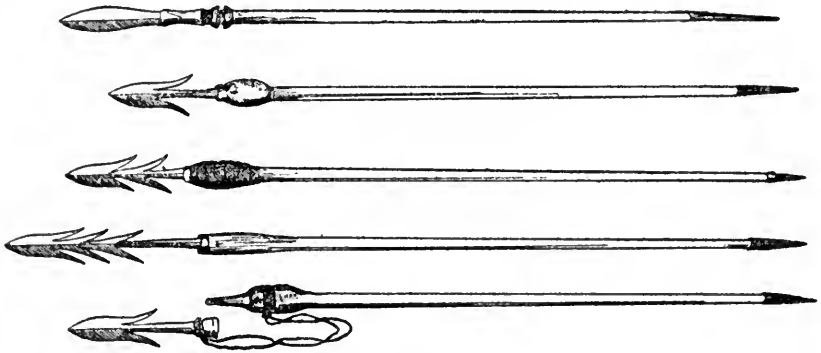


FIG. 9.
SPEARS.

A considerable part of these are made in the villages along the upper reaches of the Buklok river and in Balbalasang, but many come into Abra through trade with the Igorot and Kalinga. They are used

¹EGERTON, *Handbook of Indian Arms* (Wm. Allen and Co., London, 1880), p. 84; SHAKESPEAR, *History of Upper Assam, Burma and Northeastern Frontier* (MacMillan, London, 1914), p. 197, illustration.

for hunting and fighting, and are intended both as thrusting and throwing weapons. In the lowlands the older type of spear-head is a modified leaf shape, attached to a ferrule which slips over the shaft. In the mountains, heads with two or more barbs are set into the handles, and are held in place by means of wooden wedges and by metal rings which surround the ends of the shafts. A metal end or shoe covers the butt end of the weapon, thus converting it into an excellent staff for mountain climbing.

Occasionally a hunting spear is fitted with a detachable head, which will pull out of the socket when an animal is struck. The shaft is attached to the point by means of a heavy line, and as this drags through the undergrowth, it becomes entangled and thus delays the flight of the game.

SHIELDS, *kalásag*.—Mention has already been made of the typical Tinguian-Kalinga shield (cf. p. 373). While this is the common type of the region (Fig. 10, Nos. 1-1a), others, which approach those of the Bontoc Igorot, are frequently used (Fig. 10, No. 2). As a rule, these come from Balatok, Lubuagan, Guinaan and the villages along the Malokbot river, all of which are strongly influenced in blood and culture by the Igorot. In the latter shields we find the prongs at the top and bottom, but they are no longer of sufficient size and opening to be of practical value. The clue to their origin is probably afforded us in their use by the Tinguian.

Across the top and bottom of each shield, near to the prongs, are two or three braided bands which appear to be ornamental, or to strengthen the weapon. Their real use, however, is to hold the *soga*, the pointed bamboo sticks which are planted in the grass to delay pursuers. A half dozen or more of these are usually to be found under the braiding at the back of the shield.

All shields are of very light wood, and can easily be pierced by a spear. They are intended to be used in deflecting missiles rather than actually to stop them. To aid in this purpose, there is a hand grip cut into the center of the back. This is large enough to admit the first three fingers, while the thumb and little finger are left outside to tilt the shield to the proper angle.

HUNTING (Plates XLV-XLVI).—Hunting must be considered more in the nature of a sport than as a necessity, for, while a considerable amount of game is taken each year, it is not enough to furnish an important part of the food supply. As we have already noted, a great part of the country occupied by this tribe is devoid of forests. Dense growths do occur in some valleys and ravines, and a few of

the mountains, like Posoey, are heavily forested, but for the most part the western slopes of the Cordillera Central are covered with rank *cogon* grass. In the ravines and on the wooded slopes are deer, pig, wild carabao, and wild chickens, and during the dry season of the year it is no uncommon thing to see a considerable number of men leaving the village at daybreak with their dogs, spears, and nets. The

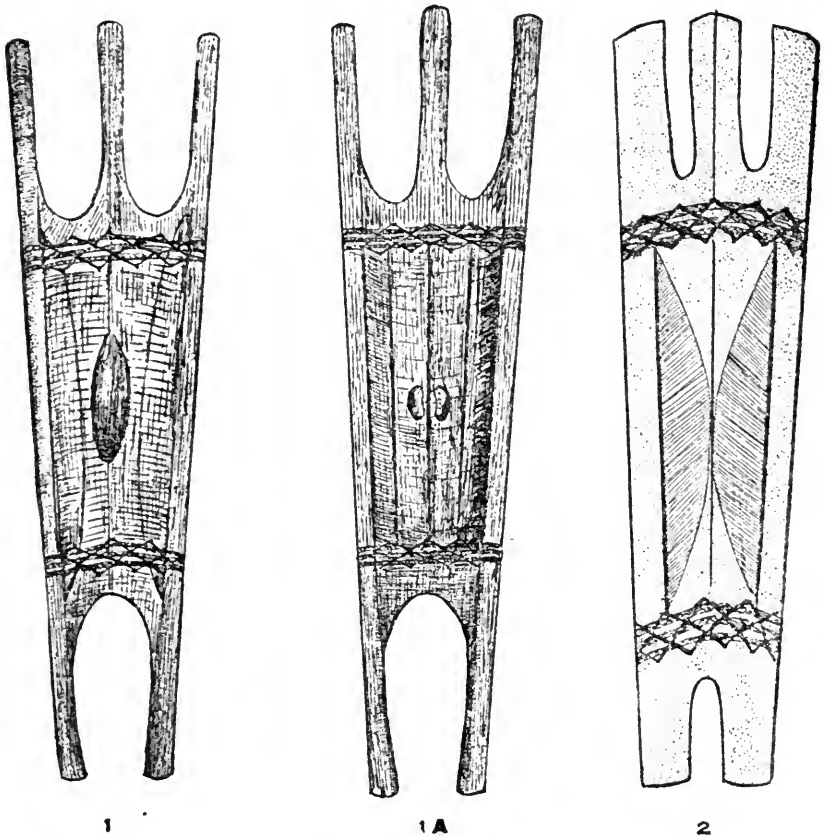


FIG. 10.
SHIELDS.

customary method of hunting the larger animals is to stretch long nets across the runway of the game. A number of the hunters, armed with spears, conceal themselves near by, while the balance of the party take the dogs to a distance and then, spreading out fan-shape, will converge on the net, beating the brush and shouting in order to stir up the game. The dogs, sullen, half-starved brutes, take little interest

in the chase until an animal is started, then they begin to bay, and the whole pack is in pursuit. As the quarry rushes into the net, the concealed hunters fall upon it and spear it to death, at the same time fighting back the hungry dogs which would quickly devour it. Sometimes an animal escapes from the net, but if wounded, it is almost certain to fall a prey to the pack. Many deer are taken by this method in the course of a year. Sometimes a wild pig is netted, and on exceedingly rare occasions a carabao. However, the wild carabao is a dangerous animal, and hunters will not attack it unless it is so entangled in the nets that it is practically helpless. Still hunting for deer, near to the feeding grounds, yields a few animals each year, and during the period when the *lumboy* (*Eugenia jambolana* Lam.) are in fruit, the hunters often hide themselves in the trees at night, and spear the pigs which come below them to feed.

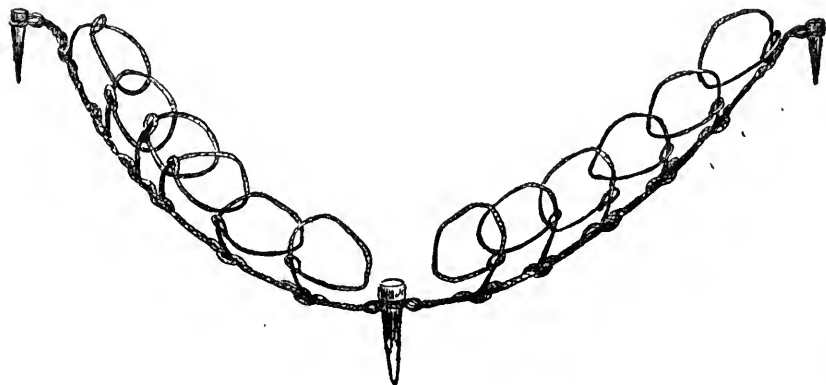


FIG. 11.
CHICKEN SNARE.

Wild hogs are also secured by placing a close fence about a field. One or two small entrances are left open and inside of these, deep pits are dug, and are covered with brush. As the animal pushes in, it steps on the frail covering, and is hurled to the bottom of the pit, where it is easily dispatched with the spear.

Among the smaller game, the wild chicken is the most important. These fowls seldom fly, but seek safety by running through the underbrush. The Tinguian takes advantage of this trait, and stretches nets loosely in the probable runway of the birds, and then drives them toward it in the same manner, as he does the deer. As the fowl runs full speed into the loose net, it folds about him, and he is easily taken.

The most common method of securing wild roosters is by means of a series of slip nooses attached to a main cord or band (Fig. 11).

This is set up so as to enclose a square or triangular space, and a tame rooster is put inside. The crowing of this bird attracts the attention of the wild fowl who comes in to fight. Soon, in the excitement of the combat, one is caught in a noose, and the harder it pulls, the more securely it is held. At times the trap is baited with worms or grain. The snare is carried in a basket-like case, which is often fitted with a compartment for the decoy rooster.¹

Another type of chicken snare consists of a single noose, which rests on two elevated strips of bamboo. The other end of the cord is attached to a bent limb, held down by means of a small trigger, which slips under a cross strip. The game is led onto the trap by scattering grain. The weight of the bird releases the trigger, the bent twig flies up, and the noose is drawn tightly.

Small birds are captured in considerable numbers by the boys who, for this purpose, make use of three types of snares. The first and most common is a simple slip noose made of human or horse hair attached to a stick. Several of these are driven into the ground close together, and grain is scattered between them. A second type of noose trap is shown in Fig. 12, No. 1. A Bamboo pole *a* with sharpened end has a spring *b* of the same material attached to its side. A cord from this passes through a small hole in the top of *a*, and then forms a slip noose. A small stick or trigger *c* is forced into the hole until firm enough to keep the line held taut, and the noose is spread on it. Bait is placed on the point of *a* in such a manner that the bird has to alight on *c* to secure it. Its weight releases the trigger, and the noose is drawn tightly around its legs. Another trap of this nature is illustrated by Fig. 12, No. 2. Here a branch is bent down and a line is attached. The trigger stick *a* slips outside *b*, and the pressure holds the free stick *c* in place against the crotch. Bait is so placed on *d* that a bird coming to secure it must stand inside the slip noose which is spread on *c*. The weight and movement of the victim releases the trigger, draws the line taut, and closes the noose about its legs.

In the lowland villages, blowguns (*salbalana*) are used to a limited extent in hunting birds. Two long strips of palm wood are grooved and fitted together. Over these the intestines of a carabao are drawn, and the whole is wrapped tightly with cord and covered with beeswax. The guns vary from 12 to 16 feet in length, and are often excellently made, yet they are little better than toys, for the missels used are only clay balls. Poison darts are unknown in this region, and the

¹ This type of snare is used by nearly all Philippine tribes, and it is also widespread in Malaysia.

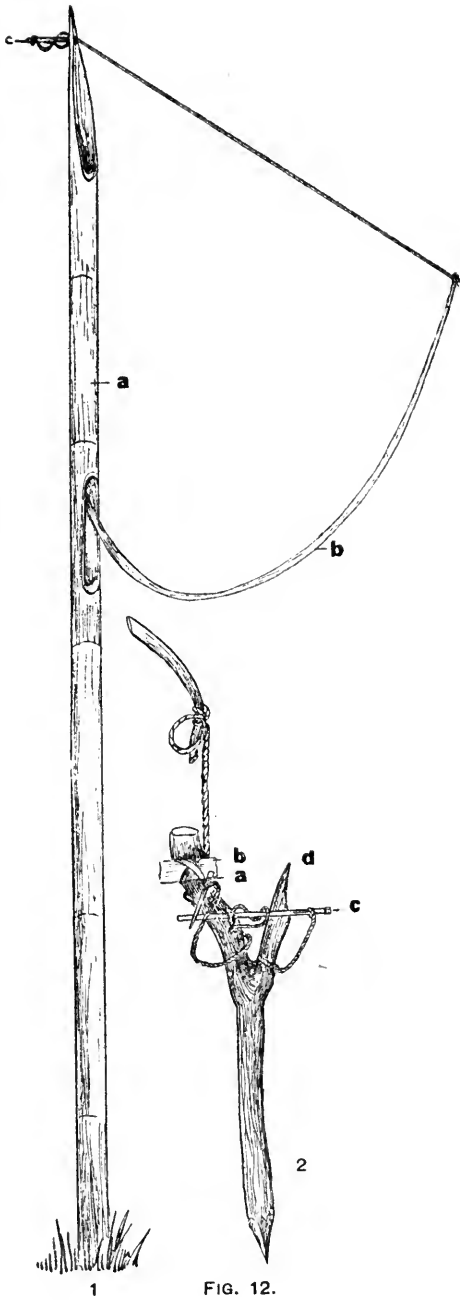


FIG. 12.
BIRD SNARES.

weapon is confined to the villages near to the coast. This, together with the fact that the blowgun does not appear in the lore or ceremonies, suggests that it of recent introduction (Plate XLVII).

Locusts are considered excellent food, and when they are flying in great numbers, are taken by means of small nets. These are attached to poles, and are swung into the swarm. Sometimes nearly the whole village will unite in such a hunt, the catch being stored in large bottle-shaped baskets until needed.

Bats and rats are not eaten, but the latter are trapped and killed because of the grain they destroy and the injury they do to the houses and their contents. The most common trap is made from a section of bamboo in one side of which a spring is inserted. A line attached to this leads to a slip noose which fits inside the tube. Bait is attached to a trigger which, when disturbed, releases the spring and closes the loop around the intruder.

FISHING.—Mention has already been made of the capture of fish by the children. Older people likewise devote some time to fishing, but not to the extent of making it an occupation. Nearly every family has a collection of traps and lines, and at times quite a number of fish and eels are secured.

The common trap is shown in Fig. 13, No. 1. The entrance is made of sharp bamboo splints, which converge toward a small hole opening into the trap proper. The device is then placed in the water in such a way that fish coming downstream will be diverted into the opening. The current and the natural inclination of the fish to go into a dark hiding-place causes them to force their way into the trap, and once in they cannot emerge. The water escapes through the bamboo slits, but the fish can only be released by opening the small end of the trap.

Many of the women carry baskets attached to the belt at the hip. The tops of these baskets have funnel-shaped openings, and are immediately available for use as traps, if a good catch is in prospect (Fig. 13, No. 2). These are usually employed for shrimps and minnows. Eels are caught in long, round traps of rattan and bamboo. A frog is fastened in the far end of the tube, usually with a fishhook. This is attached to a rattan spring, which is connected with the door of the trap. The eel enters and seizes the frog, but as it starts to back out, it releases the bent rattan, and the door is pulled shut.

Small hand nets, spread apart by means of sticks held in the hands, are used by women in scooping up small fish. Ordinarily, it is scooped away from the body, but if a fish takes refuge under a rock, the net

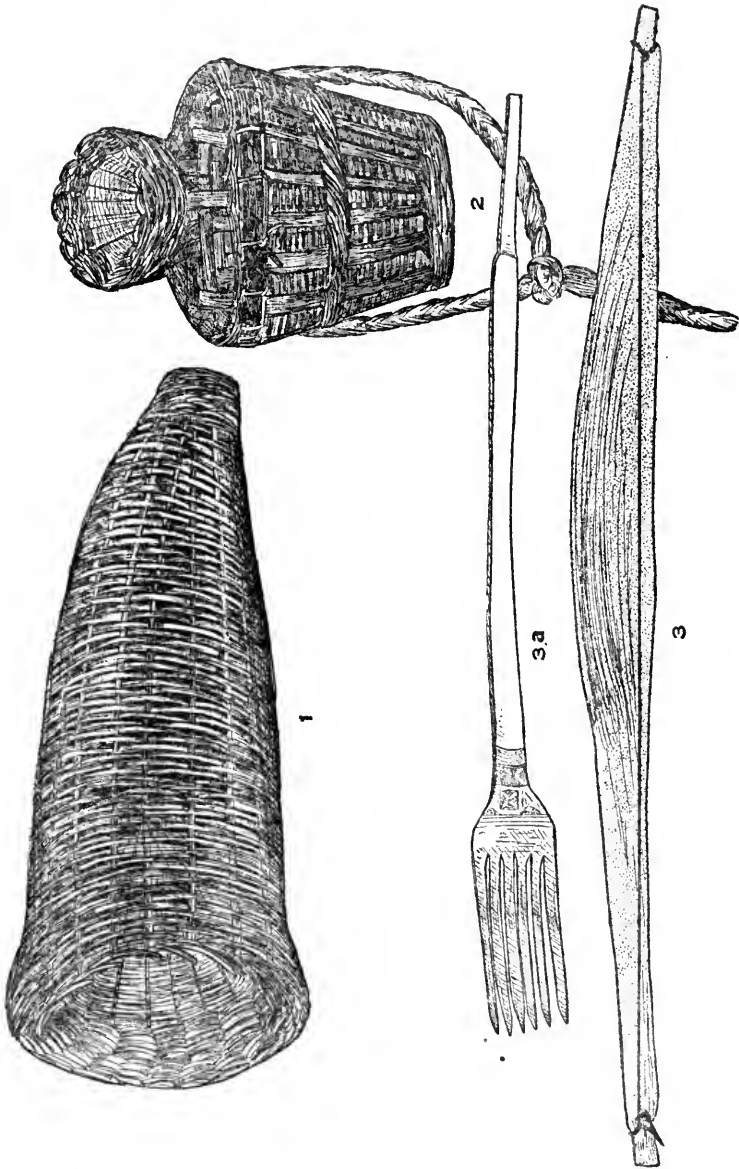


FIG. 13.
FISHING DEVICES.

is placed under the opposite side, and the stone is turned over with the foot.

The most effective fishing-device is a large throw net made cornucopia shape. The large net is open and weighted with many sinkers of lead. The man throws the net with a full arm sweeping motion, so that it spreads to its full extent, and all the sinkers strike the water at the same time. The splash causes all the fish inside the circle to dart inward, and as it sinks, the net settles over them. The fisherman draws in the cord attached to the small end, causing the sinkers to drag along to the bottom until directly beneath him, when their weight closes the net. It requires much skill and practice to throw this net properly, but once the art is mastered, the fisherman is very successful.

Blanket fishing similar to that in use by the neighboring Igorot is found here. A large blanket is weighed down with stones, and is placed in the river. After one or two hours have elapsed, a number of men form a wide circle around it. Often they drag between them a rope to which many corn husks are attached. As they advance toward the blanket, they turn the larger stones with their feet so that any fish hiding beneath them will be frightened away. The circle of men and corn husks causes the fish to go toward the blanket, and finally to take refuge under the stones piled upon it. When the blanket is reached, the men seize the corners and lift it out of the water on to the bank, where the stones are thrown out and the fish secured. A somewhat similar idea is found in the *lama*. Quantities of leaf branches are sunk into a still pool, and are left for a few days until the fish have come to use them as a hiding-place. A number of men make a close fence of bamboo sticks about them, then go inside, throw out the branches, and catch the fish with their hands or with the nets. Streams are often diverted from their course, for a time, and then returned, leaving the fish in the artificial channels stranded.

A curious method of fishing was seen in the Ikmin river. A hook was fastened in the end of a bamboo pole, and close to this a minnow was attached to a short line, to act as a lure. When the other fish approached the captive, the pole was jerked sharply, in an attempt to snag them. On one occasion the writer saw fifty fish taken by this method in less than an hour.

Short lines attached to sticks are often baited, and are set along the embankments of the flooded rice-fields. Small fish spears with detachable heads are also used in the rice lands, as well as in the clear pools. The only occasion when the bow and arrow is used in this region is when the rice fields are flooded. At such times a short

bow and an arrow with fork-shaped head are employed (Fig. 13, Nos. 3-3a). A fish poison or stupifier is occasionally used. A small red berry known as *baiyatin* is crushed, and the powder is thrown into or just above quiet pools, where fish abound. Some of the fish become stupified and float on the surface, where they are quickly speared or scooped up. They are eaten without any ill effects.

VIII. ECONOMIC LIFE

RICE CULTURE.—The most important crop raised by the Tinguian is rice, and to its cultivation he devotes a considerable portion of his time. Two distinct methods of growing are now found throughout the district—the mountain or upland fields, in which the rice is raised without irrigation; and the rice terraces with irrigation¹ (Plate XLVIII). To prepare the first type of field, a piece of forest land is chosen if possible, or lacking this, a plot covered with second growth is selected. The purpose in using timber land is to escape the cogon grass (*Imperata koenigii*), which quickly invades all open

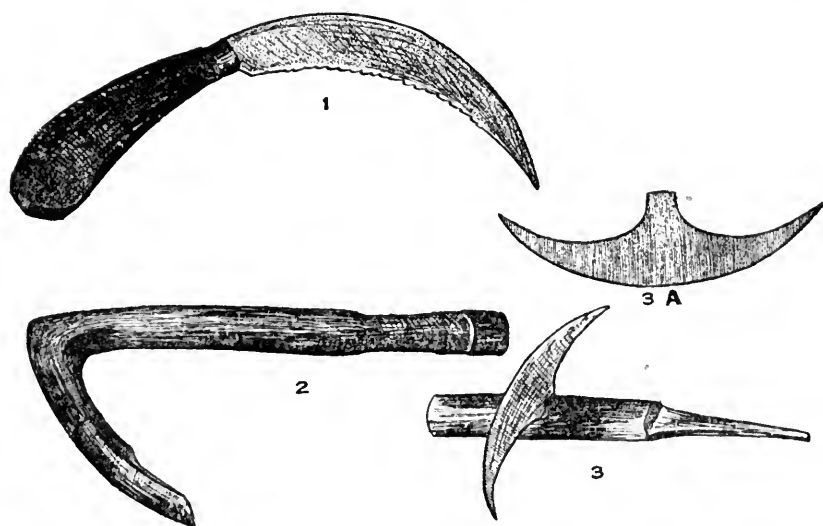


FIG. 14.
GRASS KNIFE; ROOT ADZE; RICE CUTTER.

fields, and flourishes until the trees again shut out the sunlight. The trees and underbrush are cut down during the dry season, so that they may be ready for burning before the arrival of the first rains. Should no timber land be available, an open piece will be selected, and after the grass is burned, the soil will be partially cleared of its stubborn roots by means of a large knife or adze-like instrument known as *pal'lek* (Fig. 14, No. 2).

¹The mountain rice is known as *langpadan*, the lowland rice as *pag'ey* (Ilocano *palay*).

After the clearing, the field is fenced in so as to protect it from deer, wild pigs, and carabao. The rudest type of protection consists of a barricade of brush, strengthened with forked sticks, in the crotches of which poles are laid. The more common method is to set bamboo tubes, at intervals, around the whole plot and to lash to them other tubes which have been split in half. A still better fence is made by cutting three holes, about a foot apart, through each upright and to insert smaller bamboo through these.

When the rains begin, the men go to the fields, each with two hardwood sticks whittled to tapering rounded ends. These are driven alternately into the soil making shallow holes an inch or so in depth, into each of which the women drop several seed rice. The whole field is gone over in this way; soil is pushed into the holes with the feet, and frequently the task is finished by sowing a few handfuls of seed broadcast and distributing it by brushing back and forth with a leafy branch.¹

In the valley districts the planting sticks are cut as needed, but in the mountains, where the upland rice is more important, strong bamboo poles fitted with hardwood points are in general use. These implements, known as *tepon* (Fig. 15, No. 1), are invariably carefully decorated with incised designs, and are preserved from year to year. Commonly, the divisions between the sections of the bamboo are knocked out and the tube used as a receptacle for the seed rice.

As the mountain fields need special protection, it is customary to build near them little elevated houses in which the workers may rest, and in which the watchers can live during the time the grain must be guarded. If the plots are near to a village, such a house seldom consists of more than a rude framework of poles, which support a grass roof, and to which a bamboo floor is lashed, two or three feet above the ground; but if the fields are at a distance, these structures are provided with sides, and are raised high on strong logs. Such high, well built houses are necessary, both to protect the occupants from surprise attacks of enemies, and to afford shelter against driving winds or rains. It is not an uncommon occurrence for a whole family to go to one of these isolated mountain dwellings and reside for a considerable period, particularly when the rice is approaching maturity.

These upland fields produce much smaller crops than do the wet lands, and as they are quickly exhausted, it is not customary to plant them to rice for more than two seasons. At the end of this time, they

¹ This is similar to the method followed in Sumatra. See MARSDEN, *History of Sumatra*, 3d ed., pp. 71-72 (London, 1811).

may be used for *camotes* (*Convolvulus batatas*), sugar-cane, or cotton, but in the majority of cases they are allowed to lie unused for several seasons, when the grass or undergrowth is again removed and the fields replanted.

The wet fields produce by far the greater part of the rice, and it is about them that most of the agricultural labors center. In the broad valleys, low embankments, of sufficient height to maintain the water at a depth of two or three inches, separate the fields. The lower plots are often of considerable length and width, some covering as much as an acre of ground, but as they begin to ascend the slopes, the walls rise higher, and the fields become narrower until they may be only a few feet in width. In the rugged mountain districts, the terraces often begin just above the flood water of the stream. At this point, a stone wall, four or five feet in height, is erected, and back of this the mountain side is cut away and filled in until it forms a step or terrace. Back of this another wall is raised, and the process is repeated until at last the terraces extend for two or three hundred feet up the mountain side (Plate XLIX). When the field is first made, top soil, enriched with vegetable growth, is laid on the surface, often to a depth of several inches, but from this time on no fertilizer, other than the decaying straw of the previous crop, is added, although the field is used continuously for many years.

Water is conducted to many of the fields by means of ditches, usually by diverting the flow of some of the numerous springs or streams but in a few instances, stone dams have been thrown across the rivers and the water carried for considerable distances by flumes and ditches. The highest terraces are first inundated to the desired depth, and then openings are made in the side walls so as to allow the lower fields to be flooded. This method of irrigation provides for the maximum use of the water, and also supplies a constant current which prevents the formation of stagnant pools.

Some of the fields are situated too far up the mountain side to be reached by ditches, and in such cases the growth of the rice is entirely dependent on the rainfall; however, in normal years, the precipitation is sufficient to mature the crop.

At the beginning of the rainy season, some of the seed rice is sprouted in specially prepared beds in the villages. In such cases a small plot is surrounded with low dirt walls, the soil is enriched with manure, water is added, and the whole is worked until it becomes a thin mud, on which the rice is thickly sown. Around this bed, a bamboo frame is erected to keep out pigs and chickens, while from time to time

water is poured on the growing shoots. The more common method of sprouting, however, is to select a piece of land, which will receive the full benefit of the rainfall and to break this with a plow drawn by a carabao.

When the seed beds have been planted, the people go to the fields, repair the embankments, and admit the water. The straw remaining from the previous crop is allowed to rot, for a time, and then the ground is gone over with a bamboo harrow (*pali-id*),¹ as shown in Fig. 15, No. 3, to remove weeds, branches, and the like. Wherever it is possible, the soil is broken with a plow, *alado* (Plate L), but in fields to which animals cannot be taken, the ground is turned by means of sharpened sticks, or poles tipped with iron, which are driven into the soil and forced forward, thus pushing the earth above them into the water.² As will be seen from the accompanying drawing (Fig. 15, Nos. 2-2a), the plow is constructed entirely of wood except for the iron share, and conforms closely to that used in Java, Celebes, Sumatra, Burma, and Annam.³

Within a few days after the plowing, the soil is further broken by dragging it with a harrow, made by driving wooden pegs into a heavy board, or into large bamboo tubes (Fig. 15, No. 4). A worker stands on this, and is dragged about the field, leveling it, and at the same time pulling out sticks, roots, and any other matter of sufficient bulk to interfere with the planting.

Two types of sleds (Fig. 15, Nos. 5-6) are used in connection with the rice culture, as well as in general transportation. The first consists of rude wooden runners on which a bamboo flooring is laid. The second has narrow runners, which are hewn with considerable care, while sides of flattened bamboo convert the sled into an open box. The first type (*pasagad*) is used principally during the wet season for the transportation of plows, harrows, and the like, the wide runners slipping through the mud without becoming mired. The use of the latter (*kalison*) is restricted to the dry season, when it is of particular advantage in moving the rice. Wheeled vehicles are not employed in any part of

¹ A similar device is employed in Java. See FREEMAN and CHANDLER, *The World's Commercial Products*, p. 36 (Boston, 1911).

² The latter is the customary method among the Bontoc Igorot. See JENKS, *The Bontoc Igorot*, p. 94.

³ RAFFLES, *History of Java*, 2d ed., Vol. I, p. 125, also plate VIII (London, 1820); MARSDEN, *op. cit.*, p. 74; FREEMAN and CHANDLER, *op. cit.*, p. 29. Both Raffles and Marsden consider this type of plow of Chinese origin. The Tinguiian name *alado* is doubtless a corruption of the Spanish *arado*, but this of course would not prove that the plow itself was derived from the Spaniards.

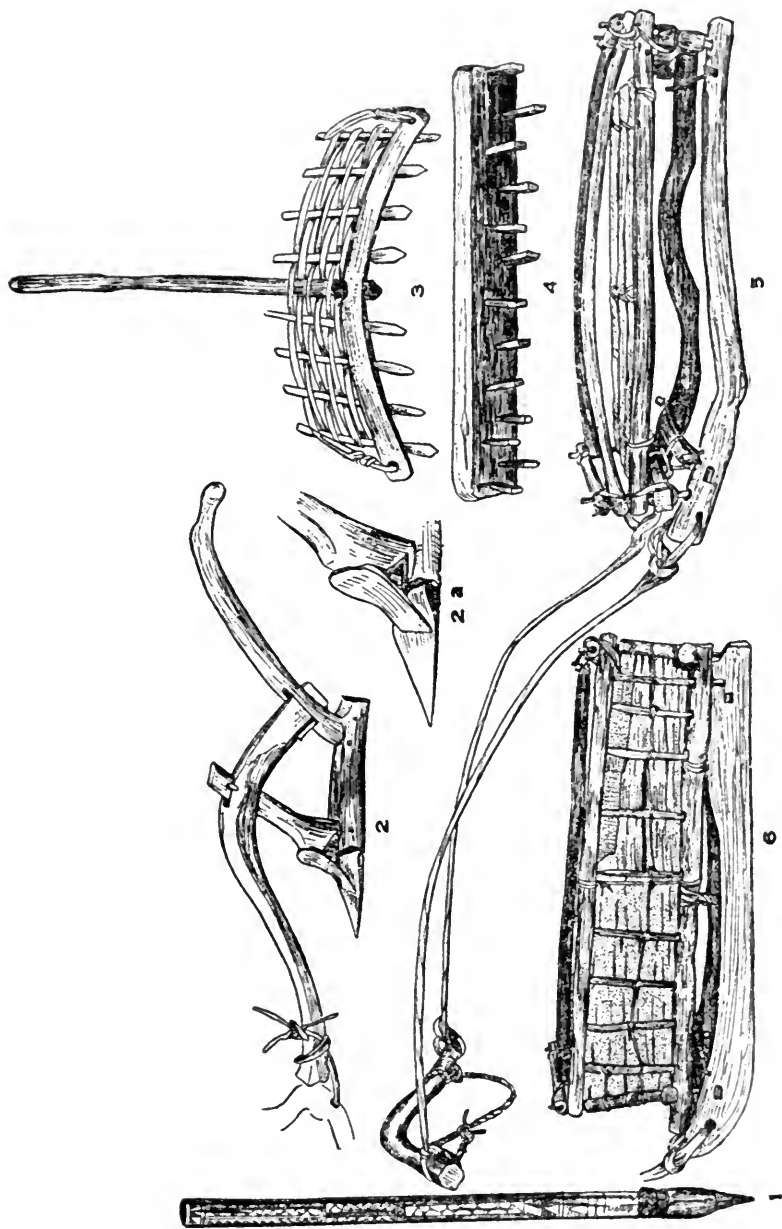


FIG. 16.
AGRICULTURAL IMPLEMENTS.

the Tinguian belt, although their use is now fairly common among the Ilocano.

It requires a month or six weeks to make ready the fields, and in the meantime the rice in the seed beds has grown to a height of twelve or fourteen inches. The shoots are then pulled up by the roots, are tied into bundles, and the tops are cut off (Plate LI). The bundles are distributed about the fields at convenient distances, and the workers then transplant the young rice—three or four together—in the soft ooze, using the thumb and fore-finger of the right hand for that purpose (Plate LII). The preparation of the field is looked after by the men and boys, and oftentimes they aid in transplanting, but the latter is considered to be women's work, and is generally left to them.

The rice is set so thickly that when a plot is planted it presents to the eye a solid mass of green. It is hard to imagine a more beautiful sight than to look down on these fields, which rise in wave above wave of brilliant green, until at last they give way to the yellower billows of *cogon* grass which cover the mountain slopes.

After the transplanting, the grain needs constant attention; at first, to keep it properly weeded and flooded; later, to protect it from animals and birds. Hence many workers are always in the fields, but it is, nevertheless, the happy time for the people, and if one approaches a group of workers unawares, he will hear one or more singing the *daleng*, a song in which they compliment or chide the other workers, or relate some incident of the hunt or of village life. Toward midday little groups will gather in the field shelters to partake of their lunches, to smoke, or to rest, and usually in such a gathering will be a good story-teller who amuses with fables, or tales of adventure.¹

When the rice begins to mature, an even stricter watch must be kept, for, in addition to its other enemies, the rice birds² now seek to feed on the crop and, while they are small in size, they often appear in such numbers that they work great havoc.

The usual device employed in frightening both birds and animals is a bamboo pole cut into strips at the top, so that, as it is shaken, these strike together, producing a great clatter. Many of these poles are planted, and then all are connected by means of rattan lines which finally lead to the little watch house. Here a man or boy sits and occasionally gives the lines a sudden jerk, which sets up a clapping over

¹ See Traditions of the Tinguian, this volume, No. 1, pp. 195, *et seq.*

² *Munia jagori* (martens). Locally known as *tikgi*.

the whole field (Plate LIII). A clever development of this device was seen by the writer in the Ikmin river valley. Here the stream flows swiftly and plunges headlong into pools every few yards. The rattan cord attached to the clappers is fastened to a small raft which is then set afloat in the pool. After a whirl in the eddy it is caught by the swift current, and is carried a few feet down stream, at the same time bending the clappers nearly to the ground; then as the raft enters calmer water, the tension is released, and it is thrown violently back into the pool from which it has just drifted; at the same time the clappers fly back into place with a great noise.

Another contrivance, used in keeping small birds from the fields, is a bird-like form cut from the bark of a banana or palm tree. Many of these are suspended by lines from bamboo poles, and, as the wind blows them to and fro, they appear like giant birds hovering over the rice.

A simple protection against deer is made by bending the white inner bark of bamboo into arches and planting these at intervals along possible places of entry, for it is said that these animals will not approach such a contrivance.

Soon after the water is turned into the fields, shells and fish begin to appear even in the higher terraces. Doubtless a considerable part of these come in through the ditches, but the natives insist that most of the fish bury themselves deep in the mud at the approach of the dry season and hibernate until water again appears in the fields.¹ These intruders are prized as food, and to secure them, short baited lines are placed along the edges of the terraces, while each woman has, attached to her belt, a small basket into which she places shells discovered during her work. The men likewise secure fish by means of hooks and lines, and also pierce them with short spears fitted with detachable points, but more commonly they shoot them with a small bow and peculiar arrows, the heads of which resemble flattened spoons cut into four or five teeth.²

As the grain begins to ripen, the land is allowed to dry, and when all is ready for the cutting, the people put on their best garments and go to the fields. Each stalk is cut separately by means of a crescent-shaped blade (*lakom* or *lakem*) attached to a small wooden cylinder (Fig. 14, Nos. 3-3a). This handle is held between the thumb, first and fifth fingers, while the stalk is caught by the second and third fingers,

¹ Probably the *ophiocephalus*. See DEAN, *American Museum Journal*, Vol. XII, 1912, p. 22.

² This is the only occasion when men use the bow and arrow.

and is pulled inward against the steel blade.¹ Many workers grasp the stalk near the head with the left hand, while the cutting blade is used with the right.

Both men and women may engage in cutting the rice, but as the latter are much the more dexterous workers, this task is generally assigned to them (Plate LIV). The grain is cut so as to leave stalks about ten inches in length; these are laid in the free hand until a bunch of considerable size has accumulated, when they are bound together with strips of bark.² At the end of the day these bundles are carried to the drying yards, where they remain until the whole crop is harvested. A drying yard is a plot of ground surrounded by a bamboo fence of such a height that it is impossible for fowls and the like to gain entrance. When all the bundles are thoroughly dried, they are placed in the granary, and from that time on the handling of the rice is given over to the women.

The granaries, or store-houses, of the Tinguian and Ilocano are identical (Plate LV), but, barring the Apayao, are different from any of the surrounding groups, except when their influence may have spread this peculiar type to a limited degree. It is worthy of note, however, that the granaries of some Sumatran groups are of similar design and construction. Such a store-house is raised high above the ground on four hard-wood poles; the framework is of bamboo, and the sides flare sharply from the floor to the grass roof. Within the framework is a closely woven matting of flattened bamboo, which is nearly water-tight; but to secure still further protection from moisture, and also to allow for free circulation of air, a rack is built in such a way that the rice is kept several inches from the outside walls. Just below the floor, each post supports a close-fitting pottery jar—without top or bottom—or a broad disk of wood, which effectually prevents the entrance of rodents.

To thrash the grain, the woman places a bundle on a piece of carabao hide, and, as she rolls it beneath her feet, she pounds it with a long wooden pestle (*hala*) until all the kernels are beaten loose from the straw.³ It is then placed in a wooden mortar (*luson*) of hourglass

¹ The neighboring Igorot do not use a cutter, but break the stalks with the fingers; however, the same instrument is used by the Apayao, in parts of Mindanao, in Java and Sumatra. See MARSDEN, *History of Sumatra*, p. 73; RAFFLES, *History of Java*, pp. 125-6, also Plate 8; MAYER, *Een Blik in het Javaansche Volksleven*, Vol. II, p. 452, (Leiden, 1897); VAN DER LITH, *Nederlandsch Oost Indië*, Vol. II, p. 353, (Leiden, 1894).

² Rice in the bundle is known as *palay* or *pagey*.

³ The Igorot woman pulls the grain from the straw with her hands.

form or with straight sides, where it is again beaten until the outside husks are loosened, and the grain is somewhat broken (Plate LVI). Winnowing is accomplished by tossing the contents of the mortar in shallow traps (*īgau*), so that the chaff is blown away, while the grain falls back into the winnower (Plate LVII).

The rice is now ready for cooking; the chaff is collected, and is used as food for the pigs and dogs, while the stalks are saved to be burned, for the ashes are commonly used in lieu of soap.

Rice has also come to have great importance, both as a standard of value and as a medium of exchange. A single stalk is known as *sanga dawa*. When the stalks are equal in size to the leg, just above the ankle, the bundle is called *sang-abtek*.¹ Ten *sang-abtek* equal *sanga-baal*. One hundred *sang-abtek* make *sanga-ōyon*. The measure of cleaned rice is as follows: Two full hands (one coconut shell full) —1 *sopa* (Ilocano *supa*; Spanish $\frac{1}{8}$ *ganta*). 8 *sopa*—1 *salop* (Spanish *ganta* or about 2 quarts). 25 *salop*—1 *kaban*.

It is customary to pay laborers in rice; likewise the value of animals, beads, and the like are reckoned and paid in this medium. During the dry season rice is loaned, to be repaid after the harvest with interest of about fifty per cent.

According to tradition, the Tinguian were taught to plant and reap by a girl named Dayapán. This woman, who was an invalid, was one day bathing in the stream, when the great spirit Kabonīyan entered her body. He carried with him sugar-cane and unthreshed rice which he gave to the girl with explicit directions for its use. Likewise he taught her the details of the *Sayang*, the most important of the ceremonies. Dayapán followed instructions faithfully, and after the harvest and conclusion of the ceremony, she found herself to be completely cured. After that she taught others, and soon the Tinguian became prosperous farmers.²

In Part I of this volume a reconstruction of the early life of this people was attempted from their mythology. The results seemed to indicate that the tales reflect a time before the Tinguian possessed terraced rice-fields, when domestic work animals were still unknown, and the horse had not yet been introduced into the land. But it was also noted that we are not justified in considering these as recent events.

At this time, with the more complete data before us, it may be well

¹ Ilocano *sanga-reppet* or the Spanish *monojo*.

² See Traditions of the Tinguian, this volume, No. 1, p. 177.

to again subject the rice culture to careful scrutiny, in the hope that it may afford some clue as to the source from which it spread into this region. It is possible that the Tinguian may have brought it with them from their early home, which may be supposed to have been in south-eastern Asia; they may have acquired it through contact with Chinese or Japanese traders, or through commercial relations with the islands to the south; or again it may have developed locally in the Tinguian, Igorot, and Ifugao territory.

It should be noted at the outset that highly developed terrace cultivation is found in Japan and China to the north; in parts of Borneo, in the Nias archipelago, in Java, Bali, Lombok, Sumatra, Burma, and India proper, and it is probable that all within this broad belt developed from a single origin.

When we compare the construction of Igorot and Tinguian terraces and the methods of irrigation, we find them quite similar, although those of the former are somewhat superior and of much greater extent. The planting of the seed rice and the breaking of the soil in the high fields are also much alike, but here the resemblances cease. In the lower fields, the Tinguian employ the carabao, together with the plow and harrow; the Igorot do not. The Igorot fertilize their fields, the Tinguian never. In harvesting, the Tinguian make use of a peculiar crescent-shaped blade to cut the stalk, the Igorot pull each head off separately. The Tinguian and Ilocano granaries are of a distinctive type radically different from the Igorot, while the methods of thrashing in the two groups are entirely different. Finally, the ceremonial observances of the Tinguian, so far as the rice is concerned, are much more extensive and intricate than have been described for the Igorot. In a like manner there are many striking differences between the methods of handling the grain by the Tinguian and those found in Japan and China. On the other hand, when we come to compare the rice culture of this region with the islands to the south, the similarities are very striking. The short description given by MARSDEN for Sumatra¹ would, with a few modifications, apply to the situation in Abra. The use of the plow and harrow drawn by carabao is found in Java and Sumatra; the common reaping knife of both these islands is identical with the Tinguian, although there is a slight difference in the way it is utilized; the peculiar type of granary found in Abra again appears in Sumatra, while the Tinguian ceremonial acts as-

¹ History of Sumatra, pp. 65, *et seq.*

sociated with the cultivation and care of the rice-recall, in several instances, details of such ceremonies in Java.

If Tinguian rice culture did come from the south, through trade or migration, in comparatively recent times we should expect to find evidences of the same culture distributed along the route by which it must have traveled. We find, however, that few terraces exist in Mindanao and northern Borneo; and the former, at least, are of recent introduction.¹ There is also negative evidence that such fields were rare along the coasts at the time of the Spanish invasion. In the early documents we meet with frequent statements that the people were agriculturists and raised considerable quantities of rice and vegetables in their clearings; but the writer has discovered only two instances in which mention is made of terraced fields.² Had extensive terraces existed on the coast, it seems certain that some notice must have been taken of them. Yet in the mountains of central and northwestern Luzon, in districts remote from coast influences, are found some of the most remarkable fields of this type in Malaysia; terraces representing such an expenditure of labor that they argue for a long period of construction.

The proof is not absolute, but, in view of the foregoing, the writer is inclined to the belief that the Igorot and the Tinguian brought their rice culture with them from the south, and that the latter received it from a source common to them and to the people of Java and Sumatra.

Many writers who have discussed the rice culture of the East Indies are inclined to credit its introduction to Indian colonists,³ but

¹ HOSE and McDUGALL (*Pagan Tribes of Borneo*, Vol. II, pp. 246-7) consider the terraced rice culture of the Murut, of northern Borneo, a recent acquisition either from the Philippines or from Annam.

² LAVEZARIS, writing in 1569-76, states that the natives, of no specified district, "have great quantities of provisions which they gathered from irrigated fields" (BLAIR and ROBERTSON, *Philippine Islands*, Vol. III, p. 269). In Vol. VIII, pp. 250-251, of the same publication, is a record of the expedition to Tue, in the mountains at the southern end of Nueva Viscaya. According to this account, the natives of that section were, in 1592, gathering two crops of rice, "one being irrigated, the other allowed to grow by itself."

³ For the history and extent of terraced field rice-culture, see FREEMAN and CHANDLER, *The World's Commercial Products* (Boston, 1911); RATZEL, *History of Mankind*, Vol. I, pp. 426, *et seq.* (London, 1896); FERRARS, *Burma*, pp. 48, *et seq.* (London, 1901); BEZMER, *Door Nederlandsch Oost-Indië*, p. 232 (Groningen, 1906); HOSE and McDUGALL, *Pagan Tribes of Borneo*, Vol. II, p. 246; PERRY, *Manchester Memoirs*, Vol. LX, pt. 2, 1915-16; WALLACE, *The Malay Archipelago*, pp. 117, 126 (London, 1894); CABATON, *Java and the Dutch East Indies*, p. 213, note (London, 1911); MEYIER, *Irrigation in Java*, *Transactions of the American Soc. of Civil Engineers*, Vol. LIV, pt. 6 (New York, 1908); BERNARD, *Aménagement des eaux à Java*, *irrigation des rizières* (Paris 1903); CRAWFURD, *History of the Indian Archipelago*, Vol. 1, pp. 358, *et seq.* (Edinburgh, 1820).

CAMPBELL¹ holds to the belief that it was practised centuries before the Christian era and prior to the Hindu invasion of Java. There seems to be no dissent, however, among these writers to the belief that its introduction antedated the arrival of the European in the Orient by several centuries. The fact that dry land farming, carried on with planting sticks and the like, is still found among the Igorot and Tinguian, and for that matter all over the Philippines, cannot be advanced as an argument that the irrigated fields are of recent date, for upland fields and primitive tools are still used in Java and Sumatra, where, as we have just seen, the wet field culture is an old possession.

MAGICAL RITES AND CEREMONIES CONNECTED WITH THE RICE.—The importance of rice to this people is nowhere better evidenced than in the numerous and, in some cases, elaborate rites with which its cultivation and care is attended. Some of these observances appear to be purely magical, while others are associated with the consulting of omens, acts of sacrifice, propitiation, and finally of thanksgiving. All are interwoven with tribal law and custom to such an extent that neglect, on the part of the individual, amounts to a crime against the community, and hence is punished with public indignation and ostracism.

When a new field is to be prepared, or a granary erected, strict watch must be kept for omens, for should the inhabitants of the spirit world be unfavorable to the project, they will indicate their feelings by sending snakes, large lizards, deer, wild hogs, or certain birds to visit the workers. Should any of these appear, as the task is begun, the place is generally abandoned at once, but if doubt still exists, or it is deemed advisable to try to persuade the spirits to reconsider, a small pig will be sacrificed. Its blood, mixed with rice, is scattered about on the ground as an offering, while the medium recites a proper *dīam*.² After a suitable time has elapsed for the spirits to partake, the liver of the animal is removed, and is carefully examined (cf. p. 307). If the omens are now favorable, the work may be resumed, but should they still be unpropitious, it is folly to proceed, for disaster is certain to follow.

The next anxiety is to secure a lusty growth of plants in the seed beds, and to accomplish this, sticks known as *salogegey*, are stuck in each plot. The surface of such a stick has been pared so that shavings stand out on it in opposite directions, for such a decoration "is pleas-

¹ CAMPBELL, *Java Past and Present*, Vol. II, p. 977 (London, 1915).

² See *Traditions of the Tinguian*, this volume, No. 1, p. 177.

ing to the spirits;" while a piece of charcoal, placed in the notched end, compels the new leaves to turn the dark green of sturdy plants. The first seeds to be planted must always be sowed by the wife of the owner, "so that they will be fertile and yield a good crop."

When a field has been constructed, or when the terraces are ready to receive the plants, a ceremony known as *Dalau*,¹ is held. The purpose of this is to secure the good will of the spirits in general, but more particularly to provide a dwelling place for the powerful being *Kaiba-an*, who guards the crops. A medium, accompanied by the family and any others who may be interested, goes to the field carrying a large bamboo pole, *bolo*² branches, stalks of *lono*³ *bakoñ*, and *saklak*.⁴ The end of the bamboo is split open, and a *saloko*⁵ is constructed to which are attached the other leaves and stalks. The *saloko* is then placed on the dividing ridge of the field, and all is ready for the ceremony, unless it is considered wise to also construct a small house (*baubauwi*). If the field is near the village, the latter is generally dispensed with, but if it is distant, the house is erected so that the spirit will accept it as its dwelling, while it is guarding the crop. It is further explained that the spirit then stays in the small house or *saloko* instead of in the rice stalks, and so they are able to grow.

A female pig is presented to the medium who, after reciting a proper *diam* above it, stabs the animal and collects its blood. This is mixed with rice, and a part is at once deposited in the *saloko*, while the balance is placed on a head-axe, and is carried about the field. When the whole plot has been traversed, this rice and blood is scattered in all directions, while the spirits are besought to come and eat. A part of the company has meanwhile been cooking the flesh of the slain animal, but before any of it is served, a skirt (*kīnomayan*) is spread at the foot of the *saloko*, and on it are placed dishes of oil and of cooked rice.

After the meal has been eaten, the family gathers up the skirt and dishes, to return them to the village, but the other offerings remain.

Rain, like all other things needed, is sent by *Kadaklan* or *Kabonīyan*. If it does not come as desired, or if the crop is not progressing

¹ Also known as *Singá* and *Baubauwi*. In *Likuan* it is held only in case the crops are not growing as they should; but in *Sisikan*, *Patikian*, and other towns of the *Saltan* River valley it is celebrated both before the planting and after the harvesting.

² A slender cane similar to bamboo, but nearly white in color.

³ *runo*, a reed.

⁴ *Justicia gendarussa* L.

⁵ Also called *salokang*. See p. 310.

favorably, a ceremony known as *Komon* or *Ubaiya*¹ is held. Each person of the village is assessed a *sopa* of rice, a bundle of *palay*, or a small coin with which pigs, *basi*, and other things necessary, can be purchased.

Early in the morning of the appointed day, the mediums, accompanied by many people, go to the guardian stones, oil the head of each, and place a bark band around it. Then having recited a proper *diam* over a small pig, they slaughter it and scatter its blood mixed with rice among the stones. Likewise they place a dish of *basi* among them for the use of the spirits. A part of the slain animal is then cooked and eaten, after which all go back to the village. At some appointed place, rice, eggs, betel-nuts, and a large pig have been assembled, and to this spot the mediums go to conduct the rite known as *Dawak*.² Before its conclusion a *diam* is recited over the pig, which is then killed and prepared for food. Meanwhile the chief medium beseeches the supreme being Kadaklan to enter her body. He comes, and after telling the people what must be done to insure the crop, he designates some one man who must, on the following morning, celebrate *Padiam*.

After all the visiting spirits have been given food and drink, a small covered raft (*taltalabong*) is constructed, and in it are placed a live chick, a cooked rooster, and other articles of food. Four sturdy men carry this to the river and set it afloat, while the people shout and beat on gongs to drive away evil spirits who might wish to steal the raft and its contents. The purpose of this offering is to supply food to any spirits who may be unable to attend the ceremony.

Early the next morning, the man who has been designated by Kadaklan to perform the *Padiam* makes ready, at his own expense, a large pig and cooked rice, and carries these to the fields. He must be dressed in striped garments known as *ginalit*, must carry a head-axe, and wear on his head the cloth band of the medium, beneath which are thrust two *igam*, that is, chicken feathers notched or decorated with bits of colored thread (cf. p. 313). He is accompanied by his wife, attired in a red jacket (*sinasaya*) and a skirt (*pina*), and by a medium who also wears the *igam* beneath a headband of *sikag*;³ while the townspeople follow behind. Arrived at the field, the medium

¹ The same ceremony may be held in order to stop the rainfall if it is too abundant.

² At this time the spirits enter the bodies of the mediums and through them talk with the people.

³ *Lygodium* near *scandens*.

squats before the bound pig, and holding a spear, betel-nuts, and oil, begins to recite a *dīam*, meanwhile she strokes the animal from time to time with oiled fingers. This concluded, she stabs the pig, and having mixed its blood with rice, scatters it over the field, calling to the spirits to come and eat, and then to grant a full harvest. The people eat part of the animal while in the field, but before returning home, the head of each family receives a small strip of uncooked flesh, which he fastens above the door as a sign that the ceremony has been held.¹ The following day, the owner and the medium return to the field and break a little soil with a spear, and the ceremony is complete, but for some days these two are barred from eating shrimp, carabao, or wild pig. The owner must also pay the medium ten bundles of rice for her assistance in insuring his own crops, as well as those of the community. Should lightning strike a field or a tree in it, this ceremony is repeated, with the exception that the strips of flesh are not distributed, nor is the soil broken with a spear.²

In Lumaba, a town strongly influenced by the Igorot, the *Ubaiya* regularly precedes the rice planting, as well as the first use of a newly constructed field. While conforming, in general, to that already described, a part of the procedure is somewhat different. On the day before the ceremony, the men go to the mountains and gather *lono* stalks, one for each house and two for the town gate. The two reeds are placed crosswise of the entrance to the village and serve as a sign of taboo, and thereafter no one may enter until they are officially removed. To do so would necessitate the repetition of the ceremony, and the offender would be obliged to provide all the things necessary for it. Likewise, no one may wear a hat or prepare food during the period of taboo.

The next day is known as *Bignas*, and at dawn all the men arm themselves with bamboo poles. With these they beat about under the houses and throughout the town, in order to drive away any evil spirits who may be lurking about. Having effectively rid the town, they force the invisible beings ahead of them to the river, where they deposit the poles. They return to the village singing and shouting, and are met at the gate by the women, who hold ladders, one on each side of the entrance, so that they meet at the top and thus form a path by which the men may enter without breaking the interdict. At

¹ In Manabo leaves and grass dipped in the blood are attached to split sticks, (*sīnobung*), and are fastened to a side wall of the house.

² Lightning is recognized as the messenger of Kadaklan.

the guardian stones, they pause long enough to sacrifice a pig and a rooster, and offer blood and rice to the spirits, and then they proceed to the center of the village, where they dance *tadek* and *da-eng* until dusk. At nightfall a pig is killed, its flesh is divided among the people, and a *lono* stalk, after being dipped in the blood, is given to a member of each family. This is carried home, and is placed on the outside wall as a sign that the ceremony has been held.

If the sun is shining the following morning, the *lakay* will go outside the town to gather wood. Upon his return the people are again free to fish and hunt, but work is forbidden until evening. Should the sun fail to appear, all remain quietly in the village until the *lakay* can remove the taboo by his wood gathering.

In Manabo the ceremony is a mixture of the two types just described, and is always held at the time of planting and when droughts occur.¹

The procedure at harvest time varies considerably in different districts, but the usual custom is for a woman, from each family, to go to the fields and cut alone until she has harvested one hundred bundles. During this time she may use no salt, but a little sand is placed in her food as a substitute. No outsider may enter the dwelling during this preliminary cutting. So strictly is this rule observed that the writer has been absolutely excluded from homes where, on other occasions, he was a welcome guest. In Lumaba and vicinity it is the custom to sacrifice a chicken two days before the harvest begins, and to cook its neck and intestines without salt. These are then divided into nine parts, are placed in dishes, and are carried to the spirit house in the field. At the end of the second day, the feathers of the fowl are stuck into the sides of the structure, and the spirits are entreated to grant a good harvest and health for the workers. The dishes are then returned to the village, and on the following morning the women may begin cutting.

When the rice is ready to be stored, the *Palpala-cm*² ceremony is held in honor of the spirit of the granary. Vines and shrubs³ are tied to each supporting post of the granary and above the door, while

¹ The Igorot villages of Lukuban and vicinity have a similar ceremony. It is here followed by a three-day period of taboo. Should the bird known as *koling* fly over the town during this period, uttering its peculiar cry, the ceremony will be repeated; otherwise, all is well.

² Literally, "to give a taste."

³ Those used are *sikag* (*Lygodium* near *scandens*), *talabibatab* (*Capparis micracantha* D. C.) and *pedped* (?).

a bit of *sikag* is also hidden inside a bundle of rice, which has been placed at each corner pole. Near one post is a small pig with its head toward the east, and over it the medium recites a *diam*. As usual, the animal is killed, and its blood mixed with rice is offered to the spirits. A part of the flesh is wrapped in banana leaves, and a bundle is buried at the foot of each post. The skull is cooked, and after being cleaned, is hung up inside the roof. The rest of the meat is cooked, and is served with rice to the little company of friends who have gathered. Each guest is also given a few stalks of the rice from the bundles at the corner posts.

Just before the new rice is placed in the granary, a jar of *basi* is placed in the center of the structure, and beside it a dish filled with oil and the dung of worms. Five bundles of *palay* are piled over these, and the whole is presented to the spirit, who will now allow the rice to multiply until it is as plentiful as the dung.

In Buneg and nearby villages, all of which are strongly influenced by immigrants from the Cagayan valley, a small clay house known as *lablabon* or *adug* is placed with the rice, and from time to time offerings are put in them for the spirit who multiplies the rice (Plate XXIX).

Certain restrictions always apply to the granary. It may never be opened after dark, for evil spirits are certain to enter, and the crop will vanish quickly. It can be opened only by a member of the family "whom the spirit knows;" and should another attempt to remove the grain, sickness or blindness will befall him. So rigorously is this enforced that a bride never opens her husband's granary until he has presented her with a string of beads, which she wears about her neck to identify her. It is further necessary that she receive a similar gift before she eats of his rice, otherwise she will become ill. However, this does not apply to others, even strangers being fed without this gift being made.

A custom which formerly prevailed, but is now falling into disuse, was for the bride and groom to visit the family fields, where the youth cut a little grass along the dividing ridges. He then took up a bit of earth on his head-axe, and both tasted of it, "so that the ground would yield them good harvests, and they would become wealthy."

CULTIVATED PLANTS AND TREES.—Near every settlement will be found a number of small gardens, in which a variety of vegetables are grown. Occasionally a considerable planting of bananas will be found, while many villages are buried beneath the shade of coconut trees, but

in comparison with rice the cultivation of other crops becomes insignificant. Nevertheless, a considerable amount of food stuff, as well as of plants and trees used in household industries, are planted in prepared land; while many of wild growths are utilized. The following list is doubtless incomplete, but still contains those of special value to this people.¹

Next to rice the *camote* (*Convolvulus batatas*) is the most important food product. Occasionally it is raised in the gardens or rice terraces, but, as a rule, it is planted in hillside clearings from which one or two crops of rice have been removed. The tuber is cut into pieces, or runners from old plants are stuck into the ground, and the planting is complete. The vine soon becomes very sturdy, its large green leaves so carpeting the ground that it even competes successfully with the *cogon* grass. If allowed, the plants multiply by their runners far beyond the space originally allotted to them. The tubers, which are about the size of our sweet potatoes, are dug up as needed, to replace or supplement rice in the daily menu. Both roots and plants are also cooked and used as food for the pigs and dogs.

Aba (*Colocasia antiquorum* Schott) is raised,² but as it requires a moist soil, and hence would occupy land adapted to rice, it is chiefly limited to the gardens. It has large fleshy roots which are used like those of the *camote*, while the leaves and young shoots are also cooked and eaten. Other tubers known as *obi* (*Dioscorea* sp.), *gakad* (*Dioscorea divaricata* Blanco), *annaeg* (*Dioscorea fasciculata*), and *kamas* (*Pachyrhizus angulatus* D. C.) are raised to a limited extent in the gardens.

Corn, *maïs*, *bukel*, and red corn, *gasilan* (*Zea mays* L.) seems to have been introduced into Abra in comparatively late times, for despite the fact that it is one of the most important crops, it has neither gathered to itself ceremonial procedure, nor has it acquired a place in the folk-lore. A considerable amount is raised in the village gardens, but generally it is planted by dibbling in the high land. When ripe, the ears are broken from the stalk, the husks are turned back, and several are tied together. These bunches are then placed over horizontal poles, raised several feet from the ground (Plate LVIII), and after being thoroughly dried, are hung from the house rafters. The common method of grinding is to place the corn on a large stone, over which a smaller

¹ Most of the identifications here given were made by Dr. Elmer D. Merrill, botanist of the Philippine Bureau of Science, from specimens collected by the writer.

² Known generally throughout the Philippines as *gabi*.

stone is rocked until a fine flour is produced (Plate LIX). Stone disk grinders, imported from the coast, are also in use. These consist of grooved stones, the upper of which revolves on the lower. Grain is fed into an opening at the top as needed. Dried corn, popped in the embers of a fire, is much relished by the children.

Several varieties of squash,¹ and beans, as well as peanuts (*manī*) are among the common products of the garden. The former are trained to run over a low trellis or frame to prevent injury to the blossoms from a driving rain. Both blossoms and the mature vegetables are used as food.

Among the minor products are ginger, *laya* (*Zingiber officinale* Rosc.) and a small melon, locally known as *melod*, which is used as a sweetening. Sugar cane, *onas* (*Saccharum*), is raised in considerable quantity, and is used in making an intoxicating drink known as *basi*. It is also eaten raw in place of a sweetmeat, but is never converted into sugar. Nowadays the juice is extracted by passing the cane between two cylinders of wood with intermeshing teeth. Motive power is furnished by a carabao attached to a long sweep. This is doubtless a recent introduction, but it has entirely superseded any older method.

The cane is raised from cuttings which are set in mud-beds until ready to be transferred to the mountain-side clearings. These lands are prepared in the same manner as the upland rice fields already described. The men dig shallow holes and set each plant upright, while the women follow, filling the hole with water and then pressing earth in with fingers or toes.

In addition to these food crops, considerable plantings of cotton or *kapas* (*Gossypium* sp.) and tobacco or *tabá-o* (*Nicotiana tabacum*) are raised in the clearings. The former is planted on the hillsides, where it matures in three or four months. The plant seldom reaches a height of two feet, and the bolls are small, doubtless due to lack of care and suitable fertilization.²

Tobacco seeds are sprouted in beds similar to those used for the rice, and the same magical device is used to insure a lusty growth. The young plants are carefully watered and shaded until they reach a height of five or six inches. They are then transplanted to hillside clearings, or to unused rice fields, where they are set out about three

¹ The three common varieties of squash are *kalabasa* (*Benincasaertifera*), *tabongau* and *tankoy* (*Curcubita* sp.).

² In the vicinity of Bakaok a small amount of *maguey* (*Agave cantula* Roxb.) is raised. It is employed in the making of cords.

to a foot. This transfer generally takes place near the beginning of the dry season, so that the crop will be sure to mature without the damaging effect of water on the leaves. The plants while lusty do not attain the size of those grown in the valley regions of the interior. As soon as the leaves begin to turn a dark yellow, they are cut off and are strung on slender bamboo sticks (Plate LX), which are then hung up in the house. When nearly dry, they are laid in piles, and are occasionally turned to prevent rust or mildew from forming.

A small amount of indigo, *tayum* (*Indigofera tinctoria*) is raised, generally in open spots near the villages. The plants receive little or no attention, yet still attain a height of about three feet. The leaves and branches are placed in water for a few days, and are then boiled, together with a little lime, the resultant liquor being used as a dye for cotton thread.

No product receives more attention in the lore of the Tinguian than the climbing vine known as *lawed* (*Piper sp.*).¹ It was formerly in universal use in connection with the chewing of betel-nut. To-day betel-nut is less common in this region, but this leaf and the areca-nut still play an important part in all ceremonies. According to tradition, it was possible in the old times to tell the fate of an absent friend by noting the condition of a *lawed* vine planted by him prior to his departure.² The vine is now trained on poles and trellises, near to many houses.

Among the larger cultivated plants and trees, the banana (*Musa paradisiaca*), coconut (*Cocos nucifera*), and bamboo (*Bambusa sp.*) are the most important.

At least twenty varieties of bananas are raised in Abra. The fruit of some of these is scarcely larger than the forefinger, while others are quite large. The common type bears a rather small, yellow fruit locally known as *saba*. In Manabo and several other villages, plantings covering three or four acres are to be found, but the usual plot is small, and is situated near to the house of the owner.

Suckers, which sprout from the roots of mature plants, are set out as needed, either to make new groves or to replace the old stalks, which are cut down after bearing. Both bud and fruit are eaten. The latter are cut on the stem while still green, and are hung in the house to ripen, in order to protect them from bats and fruit-feeding birds.

The coconut (*n̄og*) is not raised in groves, as in the Christianized

¹ A less esteemed species is known as *lalawed ta aso* ("dog lawed").

² See Traditions of the Tinguian, this volume, No. 1, p. 100.

districts, but in many villages every house has two or three trees towering above it. Even the interior mountain settlements, like Lingey, Ba-ay, and Likuan, are hidden beneath these trees, thus incidentally disposing of the fable that "the coconut tree will not grow out of sight of the sea." Young trees have to be protected by fences during the first two or three years of growth, or they will be uprooted by the pigs, but from that time on they require little or no care. They are not tapped for sap, as is customary in most parts of the Philippines, but notches are cut in the tree trunks in order to supply foothold for the fruit gatherer. The nuts are cut off with a knife as soon as ripe, else they may fall and cause death or injury to people below.

No other fruit serves the people in so many ways. The juice is relished as a drink, the meat as a food, the oil as a food and hair dressing; the shells serve as dishes and cups, or are carved into ladles, while the fibrous covering of the nut is converted into foot wipers, thread brushes, and the like.

The betel-nut, *bwa* (*Areca catechu* L.), is also found in some villages, particularly in the mountains. It is a tall, slender palm which yields the nut so prized throughout the Islands for chewing.

Mango-trees, *mangga* (*Mangifera indica* L.) appear here and there in valleys and on mountain sides, where the seeds have doubtless been carried by birds or travelers, but considerable groves are found in many districts. The fruit is picked before it is ripe, and is eaten as it becomes mellow.

Other trees and shrubs which are occasionally planted are: *Atis* (*Anona squamosa* L., an American plant) prized both for its fruit and bark—the latter being used in rope-making.

Atatawa (*Jathropha multifida* L.). Also found in a wild state. The fruit is used as a purgative. The *Jathropha curcas* L. is also used.

Daligan (*Averrhoa carambola* L.) or Coromandel gooseberry. The fruit is eaten without cooking.

Lanka (*Artocarpus integrifolia* L.). Jackfruit.

Maling-kapas or *kapas to insit* (*Ceiba pantadra* Gaertn.), also known by the Ilocano as *kapas sanglay*. This so-called "Chinese cotton" is a small tree with few, but perfectly straight, branches, which radiate from the trunk in horizontal lines. It produces elliptical pods which burst open when ripe, exposing a silky white cotton. The fiber is too short for spinning, but is used as tinder and as stuffing for pillows.

Orange (*lokban*) and lime (*lolokisen*) trees are greatly prized, but

appear only occasionally. They receive no care, and consequently yield only inferior fruit.

The *pias* (*Averrhoa bilimbi* L.) is a garden tree which produces an acid fruit used in cooking.

Santol (*Sandoricum indicum* Cav.) trees are raised both for the fruit and for timber. It is said that house posts of this wood are not attacked by white ants.

WILD PLANTS AND TREES.—Few of the wild growths have escaped the attention of this people, and many are used as food and medicine, as well as for fiber materials and bark cloth. Among those used for food, the following are the most important:—

Apang or *sapang* (*Bixa orellana* L.).

Alloseup (*Antidesma ghesaembilla* Gaertn.).

Bayabas, or lemon guava (*Psidium guayava* L.), an American shrub which now grows wild, and in great abundance, in the mountains.

Balatong (*Phaseolus mungo* L.). Only the seeds are used.

Damokes (*Pithecolobium dulce* Benth.), an American tree which now grows spontaneously in northern Luzon. The fruit is eaten, while the bark is sometimes used for tanning.

Ipako (*Psophocarpus tetragonolobus* D.C.), a herbaceous vine infrequently seen in the gardens. The young pods are used as a condiment.

Kochai (*Allium tricoccum*) or wild leek.

Katodai (*Sesbania grandiflora* P.). Only the flowers are eaten.

Kama-al (*Allacanthus luzonicus* Blanco. Vill.).

Kalot (*Dioscorea daemonia* Roxb.), a tuber, poisonous if eaten without special preparation. It is cut into small pieces, and is placed in running water for several days, after which it is cooked.

Kamatis (*Lycopersicum esculentum* Mill.), tiny tomatoes which are eaten raw or cooked.

Labok (*Colocasia antiquorum* Schott).

Longboy (*Eugenia jambolana* Lam.).

Olo (*Cissus* sp.), a low climbing herb, the stems and leaves of which are used in place of vinegar.

Palda (*Phaseolus lunatus* L.), civet bean.

Sili (*Capsicum frutescens* L.), small red peppers. The American chile. Used as a condiment.

Specimens of about twenty other food plants and trees were obtained, but their identification was impossible.

The wild growths used as medicines, or in the manufacture of string, rope, and bark cloth, will be mentioned under those headings.

PLANTS AND TREES USED IN THE TREATMENT OF DISEASE.—Most sickness is thought to be caused by spirits, either with evil intent or to punish some wrong-doing or oversight on the part of the people. To placate or bribe these superior beings, elaborate ceremonies are held, but in addition to these a number of simple remedies are made use of. The efficacy of some of these medicines is explained by the fact that certain leaves or infusions are distasteful to the spirits of disease, which, consequently, take their departure. Again, a trouble such as a tooth-ache is caused by a small worm which is gnawing at the tooth. To overcome this, the bark and leaves of the *alem* tree are thoroughly beaten, and are applied to the face. The worm smells the crushed leaves, and straightway enters the poultice which is then burned. The spirits which bring the cholera can be driven away by burning the leaves of *sobosob* (*Blumea balsamifera*), *bangbangsit* (*Hyptis suaveolens* Poir.) and *dala* (?) beneath the house; likewise, the bark of the *bani* (?) keeps the bearers of constipation at a distance. *Bangbangsit* is also considered as a cure for stomachache, diarrhoea, and is an aid in bringing on menstruation. When used for these purposes, the root is boiled, and the liquor is drunk. The fresh leaves will also relieve a pain in the stomach if applied to it, while the fruit is eaten to cure diarrhoea. If the patient is already affected with cholera or dysentery, the leaves of the *sobosob* are placed in a jar of water at the mouth of which a clay ball is suspended, and the whole is then completely covered with banana leaves. The pot is placed over a fire, and the steam being unable to escape is absorbed by the clay. Later this is crushed, is mixed with water, and is swallowed by the patient. Lard burned to a crisp is likewise mixed with water, and is drunk to relieve diarrhoea.

Fever is a frequent ailment, and several medicines are employed against it. The most common is to crush the leaves of the *dangla* (*Vitex negundo* L.) in vinegar made from *basi*, and to add to this a fourth part of urine. The patient drinks a shell cup of the liquor, is washed in cold water, and then is briskly rubbed with fine salt. Young banana leaves are applied to the flesh, and over these blankets are placed. This is repeated twice daily until the fever is broken. Wild tomato leaves, pounded and applied to the abdomen, are also considered valuable in causing the patient to sweat. If the trouble is unusually severe, a hot bath is prepared by boiling the leaves of the lemon, *atis* (*Anona squamosa* L.), and *toltolang* (?) trees in water. After the patient has been bathed in this, he is wrapped in blankets. The same remedy is used to cure fits.

Snake bite is treated by chewing the bark of the *alonon* (*Streblus*

asper Lour.), or *kasabong* (*Argemone mexicana* L.), or the root of the *talabatab* (*Capparis micracantha* D.C.), all of which cause vomiting.

The fruit of the *soloyot* (*Corchorus olitorius* L.), when baked and ground to a powder, likewise produces vomiting, and is used for any kind of poisoning.

To relieve the itch, the juice of the *kabatiti* (*Luffa acutangula* Roxb.), *Bayabas* (*Psidium guajava* L.) or *lew-lew* (*Ficus haulili* Blanco) is mixed with vinegar and soot, and is applied to the skin. The milky exudation of the *kalinbrwaya* (*Euphorbia nerüfolia* L.) is also placed on the affected parts.

During the rainy season the people are greatly troubled with small blisters which form between the toes and quickly break down, leaving open sores. To "harden" the feet, they hold them over burning straw.

Certain other aids against disease are also employed. Cracked feet are treated with carabao dung; the nest of a small cave bird (*nido*) is crushed in water, and is drunk as a cure for coughs; while the flesh of the shell fish (*kool*) is applied to boils. A further cure for the itch is made by pounding a coconut shell into a fine powder. This is placed in a jar, over a hot fire, and a piece of iron is laid over the top. The "sweat" which collects on the iron is said to give instant relief.

An infected ("bad") finger or limb is tightly bound "to keep the sickness from going up."

USE OF BETEL-NUT, TOBACCO, AND STIMULANTS.—A study of the tales and ceremonies makes it evident that the betel-nut (*bwá*) was at one time extensively used. To-day it occupies an exceedingly important place in the religious rites, but is seldom chewed. When it is offered to the spirits, it is still prepared in the way that is universal throughout Malaysia. The nut of the areca palm (*Areca catechu* L.) is split into four pieces, fresh lime is spread on a piper leaf (*Piper betel* L.), this is wrapped about the piece of nut, and is ready for chewing. The areca palm grows well in this territory, and quite an extensive grove is to be found near the village of Bakaok, yet this is the only place where any number of the people are addicted to its use. Tobacco (*tabáo*), on the other hand, is in universal use, although it certainly was introduced after the arrival of the Spaniards. The leaf is dried, and is rolled into thin cigars which are placed in tiny pipes (Fig. 21). The cigar itself is never held in the lips, nor is the leaf chewed. Young and old of both sexes smoke frequently, but not a great deal at a time. After taking a few puffs, the pipe is stuck into the hair, or under the inner band of the hat, until again needed.

The only intoxicating drink made and used by this people is the fermented juice of the sugar-cane, known as *basi*. The juice when extracted from the cane is boiled with water for four or five hours. It is placed in a large jar together with cinnamon bark, and is tightly covered over with leaves. Fermentation begins almost at once, but for a month the drink is raw and little prized. In three or four months, it becomes quite mellow and pleasant to the taste. Jars are sometimes stored away to be opened only for some important event, such as a marriage festival or the celebration of a great ceremony. At such a time a very definite procedure is followed. The most honored guest is invited to do the serving. He removes the covering, dips into the liquor, pours a little on the sides of the jar, and then a few drops on the ground as an offering to the spirits. A coconut shell cup is then dipped out, and is carried to the *lakay* or some other old man. Before he drinks, he raises the cup to the level of his face, and, beginning at his right, offers it to each person in the circle. The one saluted makes a gesture away from his body with his right hand, the palm upturned. When all have refused the cup, the man drinks, often he stops to sing the *daleng*, an improvised song in which he compliments his host, bespeaks the welfare of his family, or praises the other members of the gathering. One after another the guests are served, but always according to age and importance, the women and young people being left to the last. The liquor is quite intoxicating, two or three drinks being sufficient to put the company in a jovial mood. It often happens that one or more will become gloriously drunk, but, as a rule, they are not quarrelsome, and there seems to be no unpleasant after-effects.¹

DOMESTIC ANIMALS.—Dogs, pigs, chickens, and carabao appear to have been long in the possession of this tribe. Horses, goats, and cattle are now owned by some of the people, but only the former are of sufficient number to be considered important.

The dogs (*aso*) are surly, ill-kept creatures of mongrel breed. They are seldom treated as pets, but are kept for hunting. Well-fed dogs are considered lazy, and hence they are fed only with a rice gruel, which seems to be neither fattening nor satisfactory. When in the village, the miserable creatures wander about under the houses, there to pick up and fight over morsels which may drop from above, or they lie in the ashes of the bonfires, the better to protect themselves from fleas

¹A similar drink was used ceremonially in Pangasinan in 1640. See ADUARTE, *Historia*; BLAIR and ROBERTSON, Vol. XXX, p. 186. It is still found in many portions of the archipelago.

and other enemies. When used in hunting, they are kept in leash until the game is started. When released, they follow the quarry at full cry, and if the game has been injured, they will seldom give up the chase. It is necessary for the hunters to follow the dogs closely and beat them off a slain animal, otherwise they will quickly devour it. They are always rewarded with a part of the intestines and some other portions, so that they may be keen for the next hunt.

Pigs (*babuy*) run at large throughout the villages or in the neighboring underbrush. They are fed at night close to the dwellings, and thus become at least half tame (Plate LXI). Many spend the hot hours of mid-day beneath the houses, from which they are occasionally driven by the irate housewives, when their squealing and fighting become unbearable. The domestic pigs are probably all descended from the wild stock with which they still constantly mix. Most of the young pigs are born with yellow stripes like the young of the wild, but they lose these marks in a short time. Castration of the young males is usually accomplished when the animals are about two months old.

Considerable numbers of chickens (*manok*) are raised. Nets or coops are arranged for them beneath the houses, but they run at large during the day time. Eggs are an important part of the food supply, but the fowls themselves are seldom killed or eaten, except in connection with the ceremonies. The domestic birds closely resemble the wild fowl of the neighborhood, and probably are descended from them. Except for a few strongly influenced settlements, cock-fighting has no hold upon this people.

The carabao or water buffalo (*nuang*) is the most prized and valuable animal possessed by this tribe. As a rule, it is handled and petted by the children from the time of its birth, and hence its taming and breaking is a matter of little moment. In the mountain region about Lakub, where most of the animals are allowed to run half wild, only the strongest are broken. The animal is driven into a Λ -shaped pen, and a heavy pole is fastened across its neck just behind the horns. It is thus prevented from using its strength, and is loaded or ridden until it becomes accustomed to the treatment. Carabao are used for drawing the sleds and for ploughing and harrowing in the lower fields. Should one be seriously injured, it would be killed and eaten; but strong animals are slaughtered only on very rare occasions. Wild carabao are fairly abundant in the mountains. They closely resemble the tame stock, and are generally considered to be derived from animals which have escaped.

IX. PRODUCTS OF INDUSTRY

IRON-WORKING.—Little iron work is now done in the valley of the Abra for the competition of the Ilocano smiths of Santa and Narvacan, in Ilocos Sur, and the cheap products brought to the coast, and as far inland as Bangued, by Chinese traders, have swamped the native industry.

Forges are still found in many villages of eastern Abra, particularly those of the upper Buklok river, but the real center of the industry is in and around Balbalasang, on the eastern side of the mountain range.

We have in northern Luzon a situation similar to that found throughout the archipelago, namely, that the most flourishing smithies are usually those farthest removed from the coast traders. Where communication is easy and trade unrestricted, the native industry has vanished, or is on the wane. To-day the forges of the Bontoc Igorot, of the Tinguian-Kalinga border villages, and of Apayao, are turning out superior weapons, but elsewhere in the northwestern districts the pagan people have either lost the art, or make only very inferior articles.

It is certain that iron-working has long been known, not only in the Philippines, but throughout Malaysia, and it is likewise evident that these regions secured the art from the same source as did the people of Assam, Burma, and eastern Madagascar, for the description of the Tinguian forge and iron-working which follows would, with very little modification, apply equally well to those in use in Southern Mindanao, Borneo, Java, Sumatra, Assam, Burma, and Madagascar.¹

Long before the arrival of the Spanish in the Philippines, the Chinese had built up such a lively trade in iron bars and caldrons that it was no longer necessary for the natives to smelt their own iron ore;

¹ COLE, *The Wild Tribes of Davao District, Mindanao* (Field Museum of Natural History, Vol. XII, No. 2, pp. 82-83); HOSE and McDUGALL, *The Pagan Tribes of Borneo*, Vol. I, pp. 194-195 (MacMillan and Co., London, 1912); RAFFLES, *History of Java*, Vol. I, pp. 192-193; MARSDEN, *History of Sumatra*, 3rd edition (London, 1811), p. 181; FERRAIS, *Burma*, p. 105 (Low, Marston and Co., London, 1901); PEAL (*Journ. Anth. Inst. of Great Britain and Ireland*, Vol. XXII, p. 250, also Plate XIV, fig. No. 2).

if indeed they ever did so.¹ This trade metal was widely distributed, and then reworked by the local smiths. Even to-day the people of Balbalasang make the long journey to Bangued, or even to Vigan, to secure Chinese iron, which they carry back to their mountain forges.

There is no positive proof that the Filipinos formerly mined and smelted iron, but there is a strong probability that they did so, prior to the introduction of trade metal. It has already been noted that the Tinguian type of forge and the method of handling and tempering iron is widespread in Malaysia; and, as will be seen later, this process is not that in use among the Chinese, so that it is unlikely that the art was introduced by them. In furnishing iron ready for forging, they were simply supplying in a convenient form an article already in use, and for which there was an urgent demand. In the islands to the south we find that many of the pagan tribes do now, or did until recently, mine and smelt the ore. BECCARI² tells us that the Kayan of Borneo extract iron ore found in their own country. HOSE and McDOUGALL say that thirty years ago nearly all the iron worked by the tribes of the interior of Borneo was from ore found in the river beds. At present most of the pagans obtain the metal from the Chinese and Malay traders, but native ore is still smelted in the far interior.³ Foreign iron is now used by the Battak of Sumatra, but deserted iron-works are known to exist in their country, while the Menangkabau still possess smelting furnaces.⁴ It seems probable that the whole industry had a common source, and was spread or carried as a unit, but when trade relations made the arduous work of mining and smelting unnecessary, it was quickly given up. That native iron might have supplied the needs of many Philippine tribes, including the Tinguian, is certain, for important deposits of magnetite and hematite are found in Abra, in Ilocos Norte, Angat, Bulacan, Albay, and other parts of the Islands.⁵ On several occasions, when on the trail, the natives have

¹ ROCKHILL, *T'oung Pao*, Vol. XVI, 1915, pp. 268-269; BLAIR and ROBERTSON, *op. cit.*, Vols. II, p. 116; III, p. 209; IV, p. 74; XXIX, p. 307; XL, p. 48, note; Philippine Census, Vol. I, p. 482 (Washington, 1905). DE MORGA, *Sucesos de las Islas Philipinas* (1609), see Hakluyt Soc. edition, pp. 338, *et seq.* (London, 1868).

² *Wanderings in the Great Forests of Borneo* (Constable, London, 1904), pp. 282-283. See also Low, *Sarawak—Its Inhabitants and Productions*, pp. 158, 209 (London, 1848).

³ *Op. cit.*, Vol. I, pp. 193-194.

⁴ RATZEL, *History of Mankind*, Vol. I, p. 434; MARSDEN, *op. cit.*, pp. 173, 181, 347 note.

⁵ Fifth Annual Report of the Mining Bureau of the Philippine Islands, p. 31; Official Catalogue of the Philippine Exhibit, Universal Exposition, p. 231 (St. Louis, 1904).

called our attention to boulders, apparently of hematite, which they recognized as iron.

The smithies are small structures with grass roofs, but no sides or floors (Plate LXII). At one end is a raised bamboo bench in front of which stands the forge. This consists of two upright wooden cylinders, usually logs hollowed out, known as *po-opan*. In each of these is a piston or plunger (*doEydoyog*) at the lower end of which is a wooden ring packed with corn husks and chicken feathers. When this is pushed downward in the cylinder, it compresses the air and forces it out of the small opening in the base, but when it is drawn up, the packing collapses and allows the plunger to be raised without effort. These pistons are worked so that one is rising, while the other is falling. The cylinders stand in a wooden block out of which bamboo tubes (*toloñgon*) conduct the air into a tube of fire clay (*ībong*), and this in turn carries it into the charcoal fire. There are no valves, as in the Chinese bellows, but the bamboo tubes fit loosely, and the fire is not drawn back. Near to the hearth is a stone anvil (*dalisdīsan*), while a heavy stone hammer, a small iron hammer, and iron pinchers complete the outfit.

The fire is lighted, and the operator sitting on the bench alternately raises and lowers the plungers in the cylinders until the fire burns brightly; then the smith puts metal into the coals and allows it to remain until it reaches a white heat. It is then removed and placed on the anvil, where his helper beats it out with the large hammer. This is a stone weighing twenty or more pounds, fitted inside the handles so that it can be used with both hands. As a rule, it is swung between the legs, and is allowed to strike the metal as it descends, but some of the men raise it above the shoulder and strike a much more powerful blow. If two pieces of metal are to be welded together, as is often the case when broken caldrons are used, they are laid, one overlapping the other, and are held together with damp fire-clay. In this condition they are placed in the fire and heated, and are then beaten together. It often takes several firings to bring about a perfect weld.

After the initial shaping, the smith completes the work with the small hammer, and the blade is ready for tempering. A bamboo tube of water is placed near by, and the blade is again inserted in the fire and brought to a white heat. Then the smith withdraws it and watches it intently until the white tone begins to turn to a greenish-yellow, when he plunges it into the water. The tempered blade is now smoothed down with sandstone, and is whetted to a keen edge. Head-

axes, spear-heads, adzes, a few knives, and the metal ends for the spear-shafts are the principal products of the forge.

The blades are by no means of equal temper or perfection, but the smiths of the Tinguian-Kalinga border villages seldom turn out poor weapons, and as a result, their spears and head-axes have a wide distribution over northwestern Luzon.

In view of the wide distribution of this type of forge and method of iron-working; of its persistence in isolated communities, while it has vanished from the coast, or has been superseded by the Chinese methods of work; as well as of other details here described, the writer is of the opinion that the art has not been introduced into the Philippines through trade, but is a possession which many or all of the tribes brought with them from their ancient home, probably somewhere in southeastern Asia. The effects of trade, in historic times, are evident throughout the Christianized regions, in Chinese and European forges and in foreign types of utensils. Likewise the influence of the Moham-medanized tribes is very marked in the Sulu archipelago, the western coasts of Mindanao, and even among many of the pagan tribes of that island, but the isolated forges throughout Malaysia and the methods described by early explorers in this field, are practically identical with those just reviewed.

SPINNING AND WEAVING.—That cotton (*kapas*) was being raised and the fibre spun into cloth at the time of the Spanish occupation of the Islands, is amply proved by many references in the early chronicles. Also there was a considerable trade in cotton, silk, and the like, carried on by the Chinese and the Brunei Moro.¹

The weaving industry seems to have reached its height in the Ilocos provinces, where the processes of ginning, carding, spinning, and weaving were, for the most part, identical with those found in Borneo, Java, the Malay Peninsula, Burma, and a large part of India.² The same methods and utensils are used among the Tinguian, but side by side with the more complicated devices, such as the ginning machine and spinning wheel, are found more simple contrivances; so it would

¹ BLAIR and ROBERTSON, *The Philippine Islands*, Vol. II, pp. 116, 207; Vol. III, pp. 203, 270; Vol. IV, p. 98; Vol. V, p. 145; Vol. VIII, p. 84; Vol. XII, p. 187; Vol. XVI, p. 106. ZUNIGA, *Estadismo* (Retana's edition), Vol. II, pp. 41, 94.

² FOREMAN, *The Philippine Islands*, p. 361 (London, 1892); BEZMER, *Door Nederlandsch Oost-Indië*, p. 308 (Groningen, 1906); SKEAT, *Man*, Vol. I, 1901, p. 178; RAFFLES, *History of Java*, 2d ed., Vol. I, p. 186 (London, 1830); BRENDON (*Journal of Indian Art and Industry*, Vol. X, No. 82, pp. 17, *et seq.*).

appear that we are here dealing with older and more primitive methods of work than are found on the coast.¹

Every step in the manufacture of cloth is looked after by the women, who raise a limited amount of cotton in the upland fields, pick and dry the crop, and prepare it for weaving. The bolls are placed on racks, and are sun-dried, after which the husks are removed by hand.

Ginning is accomplished by two methods. The simplest, and doubtless the older, is to place the cotton on a smooth wooden block and to roll over it a wooden cylinder which tapers slightly toward each end (Fig. 16, No. 1). The palm of the hand, at the base of the fingers, is placed on the roller and the weight of the body applied, as the cylinder is moved slowly forward, forcing the seeds from the floss.² The more common instrument (*lilidsan*) acts on the principle of a clothes wringer (Plate LXIII). Two horizontal cylinders of wood are geared together at one end, and are mounted in a wooden frame in such a manner that they are quite close together, yet not in contact. A handle is attached to the lower roller at the end opposite the gears, and as it is turned, it rotates the cylinders in opposite directions. A piece of cotton is pressed between the rollers, which seize the fibres and carry them through, while the seeds are forced back and fall to the ground.

The cleaned cotton is never bowed or otherwise separated with a vibrating string, as is the case in Java, India, and China, but the same result is obtained by placing it on a piece of carabao hide and beating it with two rattan sticks until it becomes soft and fluffy (Plate LXIV).

After the carding, the cotton is spun by placing it in a hollow cylinder of palm bark attached to a bamboo stick (*tibtibeān*). A bit of thread is twisted from the cotton at the bottom of the cylinder, and is attached to a spindle, which is rubbed rapidly against the naked thigh, and is then allowed to turn in shallow basket, or on a piece of hide. As it spins it twists out new thread and the arm of the operator rises higher and higher, until at last the spindle stops. The position of the extended arm is then altered, and the spindle again set in motion in order to wind up the new thread on the shaft. While the spinning is progressing, the free hand of the operator is passed rapidly up and down the thread, keeping the tension uniform and rubbing out any inequalities (Plate LXV).

¹ Weaving in cotton is a recent introduction among the neighboring Bontoc Igorot. Formerly their garments were made of flayed bark, or were woven from local fiber plants. The threads from the latter were spun or twisted on the naked thigh under the palm of the hand. Cf. JENKS, *The Bontoc Igorot*, p. 113 (Manila, 1905).

² A similar device is used in Burma.

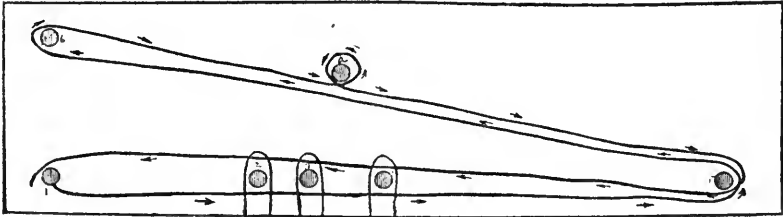
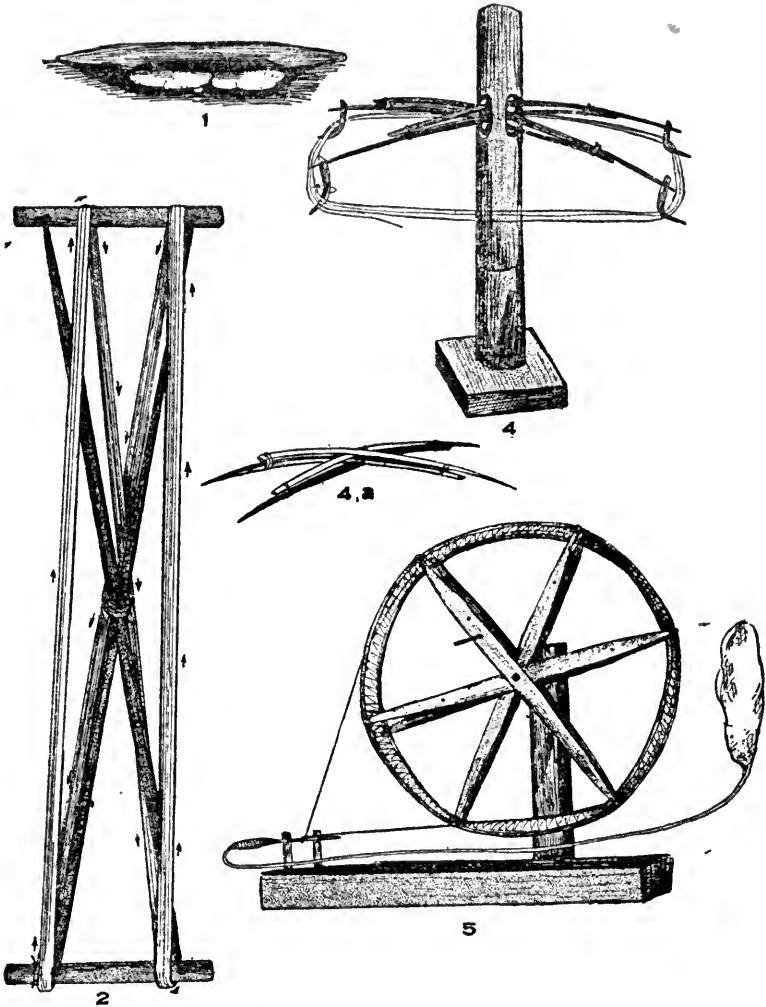


FIG. 16.
DEVICES USED IN SPINNING AND WEAVING.

In many sections the spinning wheel used by the coast natives is beginning to replace the hand outfit (Fig. 16, No. 5). The mass of fiber is held in the left hand, and a thread from it is attached to a horizontal spindle, which is turned by a cord passing over a large wheel. This method is much more rapid than the hand device, but the thread is less uniform, and it is seldom utilized when a fine fabric is to be woven. Bamboo bobbins, consisting of small tubes, are also wound by attaching them to the spindle shaft, so that the thread is transferred by the revolution of the wheel.

As soon as the thread is spun, it is placed on a bamboo frame (*lalabayan*), Fig. 16, No. 2, on which it is measured and made ready for the combing and sizing. As it is taken from the measuring frame, a bamboo rod is passed through each end of the loop, and these are fastened tightly inside the combing device (*agtatagodan*) by means of rattan bands. The thread is then carefully combed downward with a coconut husk which is dipped in a size of rice water (Plate LXIII). After drying it is transferred to the shuttles and bobbins by means of the wheel described in the previous paragraph or by a more primitive device, called *ololau* (Fig. 16, Nos. 4 and 4a). This consists of four horn hooks attached to bamboo sticks, which pass through openings in a bamboo tube in such a manner that they slip on each other, and thus produce a wheel of any size desired.¹ The tube fits loosely over a wooden peg sustaining the wheel in a horizontal position, yet turning readily. The loop of threads from the sizing frame is laid on the hooks, from which it is drawn by hand onto the bobbins and shuttles. The next step is to prepare the warp for the loom. The thread is drawn from bobbins on the floor, and is first fastened to peg No. 1 of the warp winder (*gaganayan*), as shown in Fig. 16, No. 3. From here it is carried the length of the board, around 5, thence to 6 and back to 1, after again passing around 5. The peg A, which later serves as a lease rod in the loom, is encircled each time by the threads passing between 6 and 5. As the warp is carried from 1 toward 5, it passes outside 2, 3 and 4, but when it is returned to 1, it is inside these pegs. These are the heddle rods of the loom, and loops from them enclose certain of the threads, thus determining the order in which the warp is to be raised in opening the shed.²

¹ The same type of wheel is found in Java. See MAYER, *Een Blick in het Javaansche Volksleven*, Vol. II, p. 469 (Leiden, 1897).

² A similar warp winder is described for Bombay (BRENDON, *Journal of Indian Art and Industry*, Vol. X, No. 82, 1903, pp. 17, *et seq.*).

The loom, while primitive, is far from simple in its operation. The warp is attached at both ends to sticks or rollers, the far one of which is fastened to a cross timber of the living room (Plate LXVI).

The web is kept stretched by means of a strap or belt, which attaches to the near roller and then passes around the waist of the operator, who sits on the floor with her feet against a bamboo brace.¹ The arrangement of the lease rod and heddle sticks has been already described; in addition to these the threads are further controlled by a reed board which acts both as warp spacer and beater-in. All being ready for the weaving, the shed is opened by raising one of the heddle sticks, and a heavy knife-shaped batten of wood is slipped into the opening. This is turned sideways to enlarge the shed, and a shuttle bearing the weft thread is shot through. By raising and lowering the heddle rods the position of the warp is changed as desired, while from time to time the weft threads are forced up against the fabric by means of the reed board, and are beaten in with the batten. Tangling is prevented by means of several flat sticks which cross the warp at some distance from the operator; while threads which show signs of loosening are carefully rubbed with a waxed stick.

On this loom the woman produces head-bands, belt, and narrow strips of cloth which are made up into blankets and the like. These fabrics are often in several colors and exhibit many tasty and intricate designs, some of which will be described in the chapter on Decorative Art.

MANUFACTURE OF ROPE AND STRING.—At least eighteen trees, shrubs, and vines are used in the making of cordage.² When small trees or limbs are used, and the bark does not adhere too tightly to the wood, sections about an arm's length are cut, and two or four splices are made at the top. These are loosened with a knife until there is enough for the hand to grasp, when the bark can be turned back like a glove. Very large sections are held by two men, while a third peels off the

¹ For the distribution of this semi-girdle or back strap, see LING ROTH, *Studies in Primitive Looms* (*Journal Royal Anthropol. Inst.*, Vol. XLVI, 1916, pp. 294, 299).

² These are: *alinau* (*Grewia multiflora* Juss.); *babaket* (*Helicteres hirsuta* Lour.); *laynai*—a large tree, unidentified; *lapnek* (*Abroma* sp.) *ka'a-ka'ag*, an unidentified shrub; *losoban* (*grewia*); *pakak*, unidentified; *anabo* (*Hibiscus pungens* Roxb.); *bangal* (*Sterculia foetida* L.); *saloyot* (*Corchoeus olitorius* L.) *labtang* (*Anamirta cocculus*); *atis* (*Anona squamosa* L.); *alagak* (*anona*); *maling-kapas* (*Ceiba pentandra* Gaertn.); *betning* and *daldalopang*, unidentified; *maguey* (*Agave cantula* Roxb.); *bayog*—a variety of bamboo.

bark. With some varieties of trees and shrubs it is found best to place the sections in the sun to dry, then a sharp bend in the stalk causes the bark to separate from the wood so that it is easily peeled off.

When large trees are used, the bark is slit lengthwise every six or eight inches, and the log is beaten with hard wood sticks. In a short time the covering loosens from the wood and is pulled off. The outside layer is worthless, but the remainder is cut into strips about a half inch in width, and is then split lengthwise into thin layers.

In rope-making three strips are laid side by side on the thigh or on a board, but with their ends at unequal distances (Fig. 17, No. 1). These are twisted together, toward the right, until a few inches have been turned, then the cord is put over one end of a double forked stick (*sikwan*), leaving an equal length on either side (Fig. 17, No. 3). The two halves are twisted together until the end of one strip of bark is reached; a new piece is laid on top of the others, and as they are turned, it becomes part of the twist. As other ends are met with, new strips are added in a like manner until all the bast desired has been made. It is then wound up on the forked stick until needed.

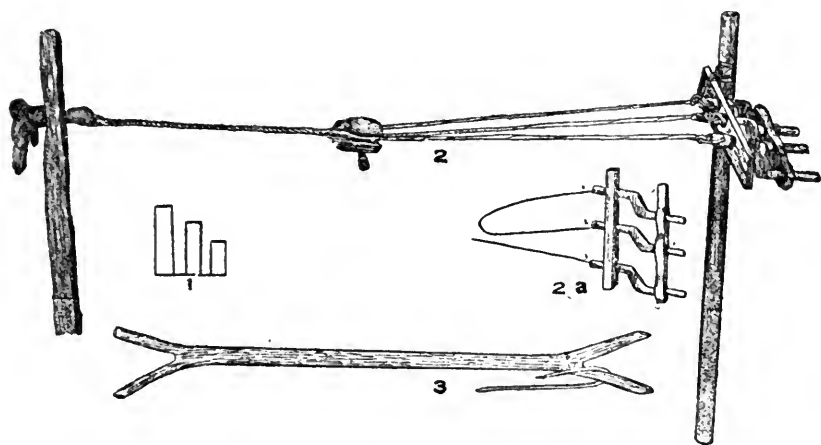


FIG. 17.
ROPE-MAKING APPLIANCES.

The rope machine (*agtatalian*) consists of three wooden whirls, which constitute the forming device, and a single whirl for the traveler, while a grooved block serves to keep the strands apart (Fig. 17, No. 2). Three equal lengths of the prepared bast are measured, and an end is attached to each of the whirls of the forming machine (Fig. 17, No. 2 a). However, only one cut is made in the bast, for strand 3.

All are attached to the single whirl of the traveler, and the process begins. The operator at each end turns his whirl, or set of whirls, rapidly toward the right, the one with the traveler bracing his foot against the lower end, to keep the twisting bast under tension. A third operator guides the grooved piece of wood from the traveler toward the forming machine, as the three strands twist round each other into rope. The bast is known as *gīnīsgīs*, the rope as *tali*.

Vines, rattan, and strips of bamboo are likewise twisted together to form crude, but strong cordage.

The making of thread is described under spinning and weaving, but the cords used in snares and the like are prepared in a different manner. The operator squats on the ground, and taking a strip of fiber, places it on his thigh; then with open palm he rolls it toward the knee. The twisted bast is bent at the center; the thumb and forefinger of the left hand hold the loop, and the two strands are placed together. These are now rolled toward the knee as before, the hand giving extra pressure on the ulnar side, and then are rolled back toward the body with pressure on the radial side. When the end of a band is reached, a new one is rolled in, and the process is continued. A tie at the end keeps the cord from untwisting.

When very long strips of fiber are used, two men will work together. One holds the end of the loop, while the other twists each half of the strip in the same direction. Then placing them together on his thigh, he turns them, under pressure, in the opposite direction, thus making a cord.

BARK CLOTH.—Bark cloth is still in common use for men's headbands and for clouts. It is secured from the same trees as the rope material, but wider strips are taken, and it is customary to beat the

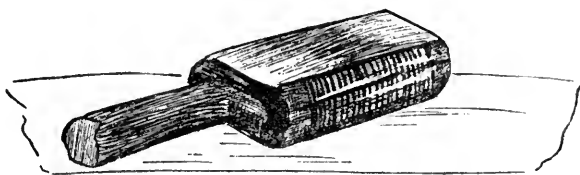


FIG. 18.
BARK BEATER.

bark thoroughly before it is removed from the wood. It is then split to the desired thickness, after which it is beaten with wooden or bone mallets (*gīkai*), which are generally grooved transversely (Fig. 18). The cloth produced is soft and pliable, but is not of the fineness of tapa, and it is always in comparatively narrow pieces. In no instance

was the operator seen to beat two strips together to gain greater breadth or to repair breaks.

BASKET MAKING.—In most districts the men are the basket weavers, but in some towns, especially of Ilocos Norte, the women are skilled in this industry (Plate LXVII). The materials used are rattan, which may be gathered at any time, or bamboo, which is cut only during the dry season and under the waning moon. It is firmly believed that boring insects will not injure bamboo cut at this time, and it is known that the dry period stalks are the strongest.

The tools employed are a short knife or a miniature head-axe and an awl. With the former the operator scrapes the outer surface, and then splits the tube into strips of the desired width and thickness. A certain number of these strips, which are to be used for decoration, are rubbed with oil, and are held in the smoke of burning pine or of rice-straw until a permanent black is obtained.¹

Five weaves are recognized by the Tinguian, but they are really variations of two—checkerwork and the diagonal or twilled.

The first and most simple is known as *laga*, the technic of which is the passing of each element of the weft under one and over one of the warp elements. Where the warp and weft are of uniform size, as in mats, it is impossible to distinguish the one from the other, but in many cases the weft is the smaller. Fish traps and storage baskets for mangoes and cotton are generally of this type (Fig. 19, Nos. 1 and 2).

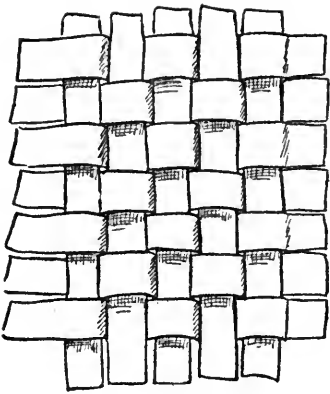
A variation of the *laga* known as *minmináta*—"many eyes"—(Fig. 19, No. 3), is found in certain types of carrying baskets, the woven tops of hats, and the like. Here the warp is crossed, and the weft passes through it in regular order so as to produce hexagonal openings.

Another variant is known as *kaláwat*² (Fig. 19, No. 4). In this the warp stems are in threes. Starting from A they are bent down, pass over and under similar sets of three, curve on themselves or other warp stems so as to leave open spaces between. The rattan wall-hangers for coconut shell dishes are usually in this weave.

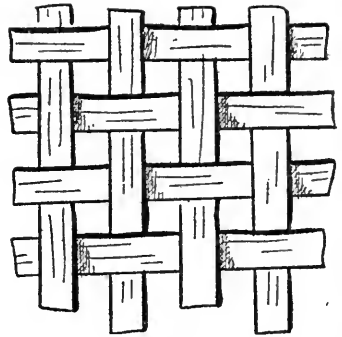
The greater part of the baskets are in the diagonal or twilled weave, in which each element of the weft passes over two or more warp elements. Variations are numerous, either to produce certain

¹ It is not essential that the oil be applied, and oftentimes whole sections are colored before being split.

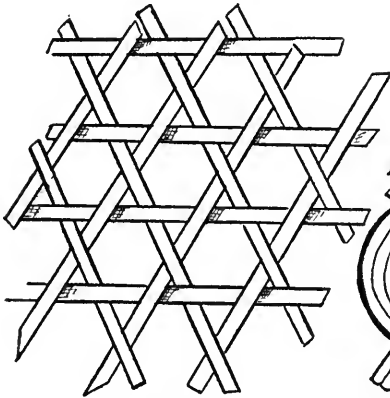
² From *káwat*, the twisting of vines about a tree.



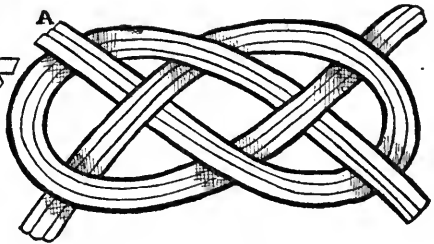
1



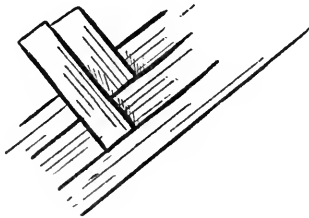
2



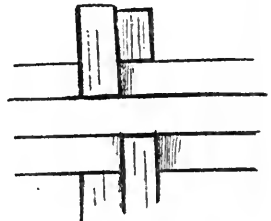
3



4



5



6

FIG. 19.
BASKET WEAVES.

effects or to accommodate designs. Of these the most common are

1 under 2 over 2 etc.

2 under 2 over 2 etc.

2 under 4 over 4 etc.

The weaver also frequently constructs the bottom with 2 over 4 under 4; then when the sides are made he changes to 1 over 2 under 2, until the center is reached; then 1 of the warp passes over 3 of the weft; for the balance the stitch is 1 over 2 under 2. This variation produces a chevron-like pattern which, in general, is known as *binakol*; but when it is desired to designate more closely, this name is applied to the weaving having an oblique effect (Fig. 19, No. 5), while the horizontal is known as *dinapálig* (Fig. 19, No. 6).

Types of Baskets:—Plates LXVIII and LXIX show the most common types of baskets made and used in this territory. Others of Igorot and Kalinga origin sometimes appear, but are seldom imitated by the local basket-makers.

Baskets 1 and 2 of Plate LXVIII are known as *kaba*, and are used principally to hold unthreshed rice, corn, and vegetables. Smaller baskets of the same form are for broken rice and cooked vegetables. The larger specimens are often made of rattan, while the smaller are usually of bamboo. Shallow bamboo baskets, *pīdasen* or *alodan* (Plate LXIX, No. 2) are used as eating dishes for cooked rice.

Clothing is put away in covered oval or rectangular baskets, *opīgan* (Plate LXIX, No. 4), while cotton is stored in long cylindrical baskets—*kolang* (Plate LXVIII, No. 3).

The *pasikeng* or *lagpi* (Plate LXIX, No. 3), commonly called the "head basket," is the chief basket of the men. It is made of rattan, and is supported on the back by means of bands which pass over the shoulders. In it are carried extra garments and all necessities for the trail. Recently some of the men have joined together two of these baskets by means of a wide, flat band, and this is fitted over the back of a horse or carabao,—an evident imitation of the saddle bags used by Spaniards and Americans. Men also carry small containers for their pipes and trinkets, or else make use of a traveling basket, such as is shown in Plate LXIX, No. 5.

Rice winnowers and sieves (Plate LVII) and the fish-traps shown in Fig. 13 conclude the list. No coiled baskets are made.

Aside from the decoration produced by variations in the weave, little ornamentation is found in the basketry from Abra, but the Tinguian of Ilocos Norte make and distribute large quantities of baskets with colored patterns. Colored vines are sometimes woven

in, but the common method is to employ blackened bamboo, both in warp and weft.

The top of the basket is strengthened by two hoops of rattan or bamboo. One is placed outside, the other inside; on them is laid a small strip of the same material, and all three are sewed down by passing a thin strip of rattan through two holes punched in margin. This strip doubles on itself, encircles the rim, and after an interval again passes through two more holes, and so on around the entire basket. A square base, attached in the same manner as the rim, generally completes the basket. In the mountain districts near to Apayao, the bases of the smaller eating dishes are drawn in toward the center at four points, giving the effect of a four-pointed star.

MATS (*ikamin*).—Mats are used as beds, never as floor coverings. They are rectangular in form, usually about six feet long and three wide, and are undecorated. They are made from strips of *pandanus* in the *laga* weave (cf. p. 423).

DYES.—In recent years aniline dyes have come into favor in some villages, and a variety of colors appears in the articles made by their weavers, but the vegetable dyes used by the ancestors are still employed by most of the women. The commonest colors are blue, pink—"black red"—, red, and yellow.

Blue is ordinarily produced by placing the leaves and branches of the indigo plant, *tayum* (*Indigofera tinctoria*) in water for a few days; then to boil them, together with a little lime. The thread is dipped in the liquid.

Pink is secured by crushing *lynga* (*Sesamum indicum* L.) seeds and boiling them in water. Threads are placed in this for five nights, while during the day they are dried in the sun. The root of the *apatot* (*Morinda citrifolia* or *umbellata*) is next crushed, and water is added. The threads are now transferred to this liquid, and for ten days and nights are alternately soaked and sunned. A copper color results, but this soon changes to pink. It is said that the *apatot* alone produces a red dye. It is also claimed that the seeds of the *apang* (*Bixa Orellana* L.) and of a variety of rattan, when boiled, give a permanent red.¹

A yellow dye is produced by boiling the leaves of the *Tamarindus indica* L. in water until a strong liquor is obtained.

Bark head-bands are stained a purplish-red by applying a liquid

¹ This is the Arnatto dye, an American plant. WATT, Dictionary, Vol. I, p. 454.

secured through boiling *kelyan* (*Diospyros cunalon* D. C.?) bark. For ceremonial purposes they are also colored yellow by applying the juice of the *konig* (*Curcuma longa*), but as this has a disagreeable odor, and the color is not permanent, it is not much used in every-day garments. Lemon juice is also applied to bark to give it a yellow hue.

Fish nets are colored brown by dipping them into a dye made by crushing the *katakot* vine in water, or by staining with the juice of the *taotawa* (*Jatropha curcas* L.).

The bamboo strips used in decorating basketry are blackened by holding them in the smoke of burning rice-straw. Black designs, such as appear in the ornamentation of lime holders and the like, are secured by rubbing oil and soot into incised lines, and then holding the object in the smoke of burning rice-straw.

NET MAKING.—Nets are used in fishing, in catching wild chickens and grasshoppers, and in hunting deer and pigs. The first three types are made of twine, but the fourth is of strong rope.

All net work is done by the man who, for this purpose, employs a mesh stick and a needle of bamboo or carabao horn (Fig. 20). The needle (No. 1) also serves as a shuttle, since it carries a considerable amount of thread between the tongue and notch. The size of the loop is determined by the width of the mesh stick or spreader (No. 2). The operator generally sits on a rice winnowor or squats on the ground with a net suspended above him (Plate LXX). He forms the mesh

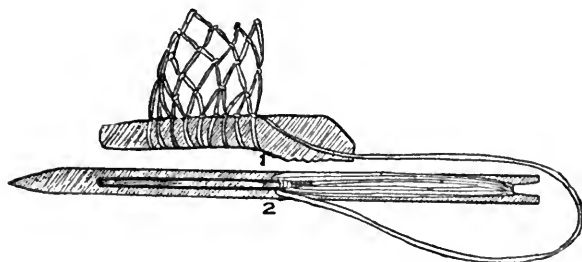


FIG. 20.
NET NEEDLE AND MESH STICK.

by running the needle over and around the spreader, and up and through the loop above, thus forming a loop on the mesh stick. This is drawn tightly, the needle is again passed through, but without encircling the stick, and thus a knot is tied. This is repeated until a row of loops has been completed, when another series is started.

MANUFACTURE OF POTTERY.—In nearly every village there are two or three women who make jars and dishes, but the potters of Abang

and Lakub are the only ones whose wares have a wide distribution.

The clay is dampened, and is carefully kneaded with the hands to remove lumps and gravel, and to reduce it to the proper consistency. A handful is taken from the mass, and is roughly modeled with the fingers to form the base of the pot. This is set on a wooden plate which, in turn, is placed in a rice winnower (Plate XXXVI). The plate takes the place of a potter's wheel, for it is turned with the right hand while with the left the woman shapes the clay, and smoothes it off with a dampened cloth. From time to time, she rolls out a coil of clay between the palms of her hands, lays it along the top of the vessel, and works and pinches it in. Further shaping and thinning is done with a wooden paddle and the dampened hand, and then the jar is allowed to dry slightly. Before the drying has progressed far enough to render the sides rigid, a smooth stone is placed inside, and the sides are tapped gently with a paddle until properly thinned and shaped.

After allowing a couple of days for drying, the potter rubs the jar inside and out with smooth stones or *lipi* seeds, so as to give it an even surface.

When several jars or dishes have been prepared, they are placed in carabao dung or other slow burning material and fired. This generally takes place at night, and the jars are left undisturbed until morning, when they are ready for service. Occasionally resin is rubbed over a jar while it is hot, thus giving it a glazed surface; this, however, is not common, as the resin quickly melts off the cooking utensils, while porous jars are preferred as water containers, since the seepage lowers the temperature of the contents.

Vessels made in Lakub are often decorated with incised patterns (Fig. 22, No. 8), but otherwise the Tinguian ware is plain. Chinese jars are found in every village, and are highly prized, but the native potters do not imitate them in form or decoration. Had Chinese blood or influence ever been strong in the region, we might expect to find the potter's wheel and traces of true glazing, but both are lacking.

PIPE MAKING.—Both men and women smoke pipes, consisting of a short reed handle and a small bowl. Men are the pipe makers, and often show considerable skill in the decoration of their product.

The common pipe-bowl is of clay, which has been carefully shaped with the fingers and a short bamboo spatula. Designs are incised, and the raised portions are further embellished by the addition of small pieces of brass wire (Fig. 21, Nos. 4-5). The bowls are baked in a slow fire, and the mouthpieces are added.

A second type of pipe, or cigar holder, is made of bamboo (Fig. 21, Nos. 1-3). Designs are incised in the sides, oil is applied, and the pipe is held in the smoke of burning rice-straw until the lines become permanently blackened (Fig. 22, Nos. 1-3).

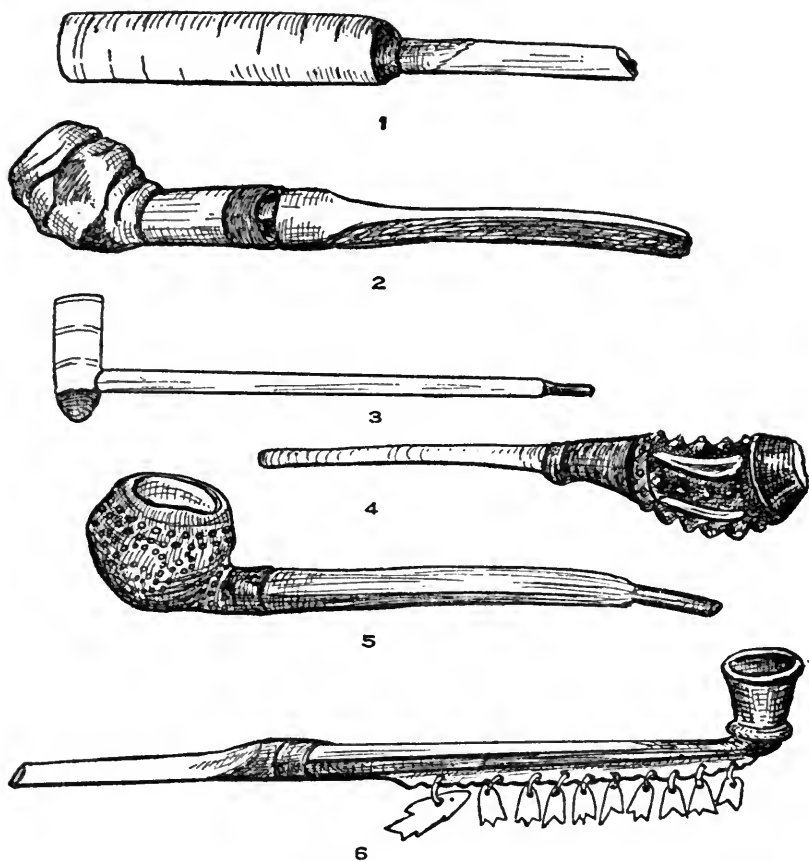


FIG. 21.
TOBACCO-PIPES.

In recent years, Ilocano jewelers have introduced silver pipes, made from coins. One Tinguian pipe maker has learned the trade, and does a lively business. He has further beautified his product by attaching pendants representing fish (Fig. 21, No. 6). Brass pipes of Igorot origin are sometimes seen, but are not made in this region.

METHOD OF DRYING HIDES.—Hides of carabao, and sometimes of other animals, are stretched on bamboo frames and are sun-dried

(Plate LV). Later they are placed in water containing tanbark, and are roughly cured. Such leather is used in the manufacture of the back straps used by the weavers, and in making sheathes for knives, but more commonly it is placed on the ground, and on it rice and cotton are beaten out.

X. DECORATIVE ART

In decorative art the Tinguian offers sharp contrast to the Igorot and Ifugao, both of whom have developed wood carving to a considerable extent. They also have their bodies tattooed, while the colored lashings on spear shafts, pipe stems, and other objects show a nice appreciation for color and design. In all these the Tinguian is deficient or lacking; he does no wood carving, tattooing is scanty, while his basket work, except that from two small regions, is plain. At times he does make some simple designs on canes, on bamboo rice-planters and weaving sticks, on lime boxes and pipe stems, but these are exceptions rather than the rule. In the region about Lakub, he decorates his jars by cutting the ends of sticks to form small dies which he presses into the newly fashioned clay (Fig. 22, No. 8), while in Manabo and some other villages the pipe makers cut the bowls of the clay pipes in floral designs or inlay small pieces of brass to form scroll patterns (Fig. 22, Nos. 4-7). These last mentioned designs are so restricted in their manufacture, and are so different from those found elsewhere in Abra, that they cannot be considered as typical.

The figures incised in bamboo show some realistic motives, such as the fish, birds, and flowers in Fig. 23, No. 1; the snake and lizard in No. 2; the man in No. 5; but the strictly geometrical is dominant in nearly every case. Probably the most typical of this class of work is shown in Nos. 3 and 4 and Fig. 22, Nos. 1, 2, and 3. It should be noted, however, that, where one decorated object is seen, many more entirely plain will be found. In short, ornamentation is uncommon and of minor importance.

The one place where decoration is dominant is in the weaving, and this is done entirely by the women. Figures 24 and 25 show typical designs which occur in the blankets. Except for No. 8 in Fig. 24, they do not appear to be copies from nature, but all have realistic interpretations. Fig. 24 shows eight designs drawn by native weavers, which are identified as follows:

1. A fish.
2. Weaving on a Spanish bed or chair seat.
3. Pineapple.
4. A heart.
5. Fishhooks.
6. A crab.
7. Cross section of a pineapple.
8. A horse.

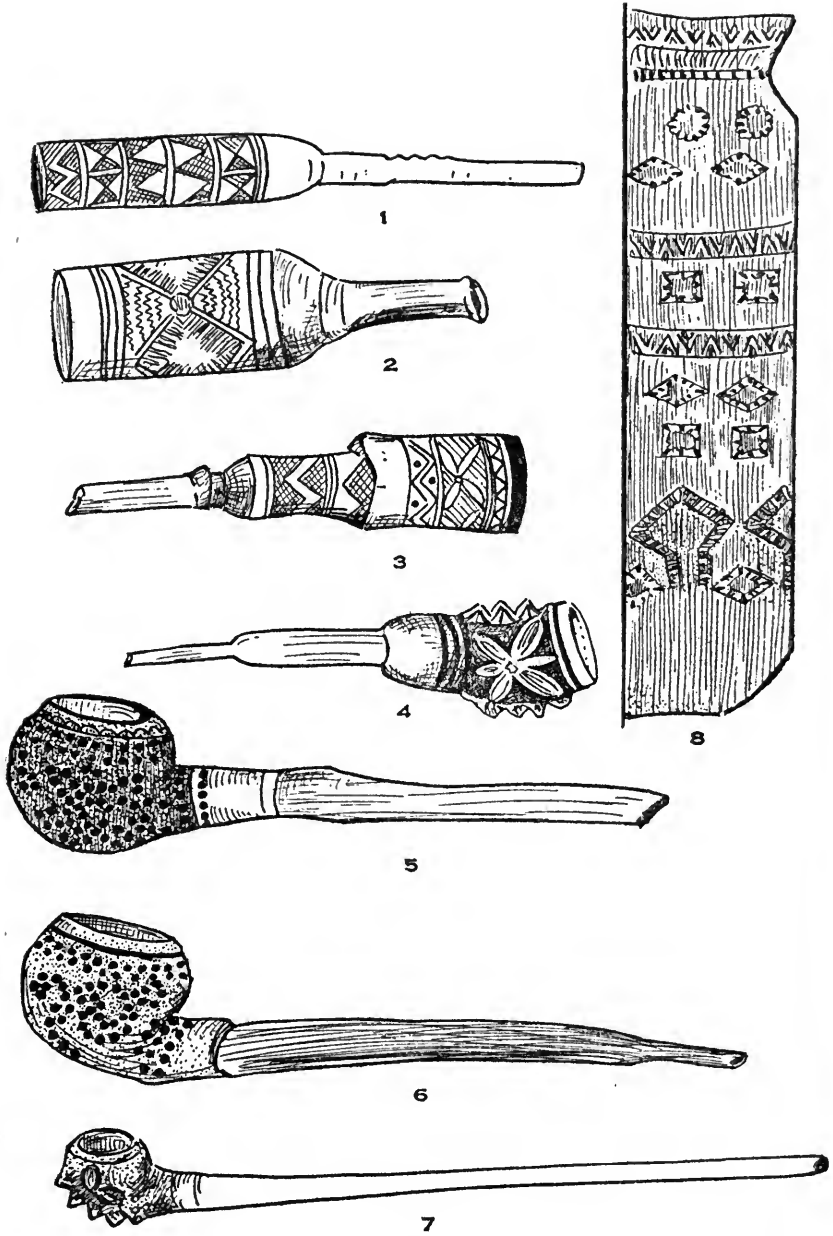


FIG. 22.
DESIGNS ON PIPES AND POTTERY.

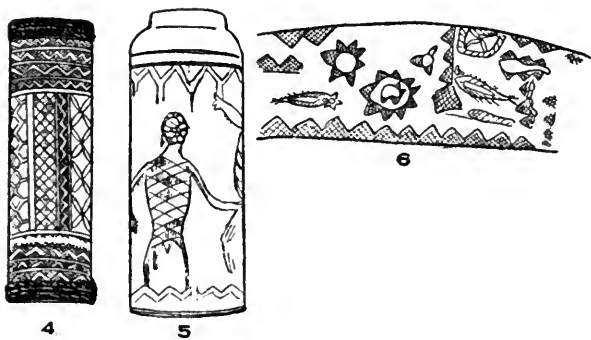
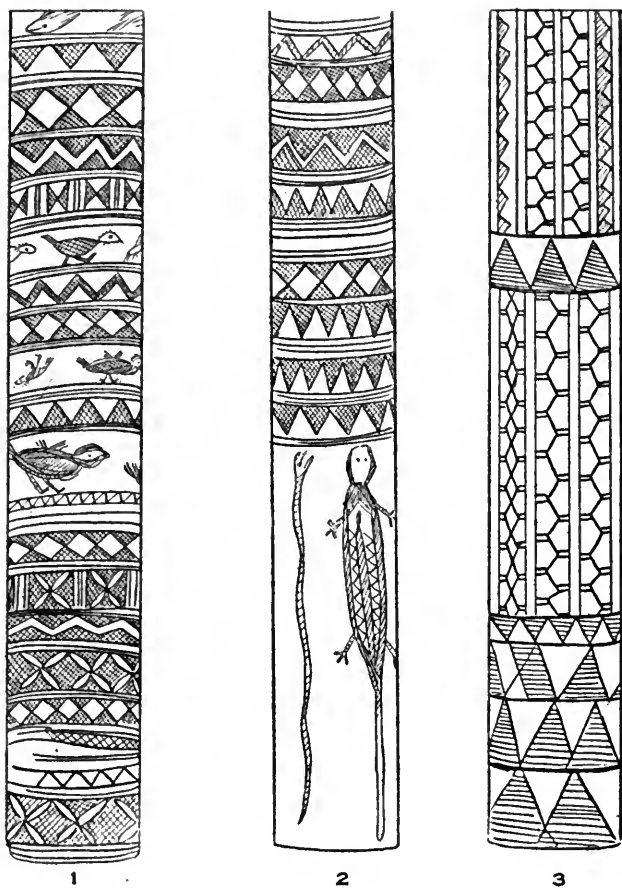


FIG. 23.
DECORATIVE DESIGNS.

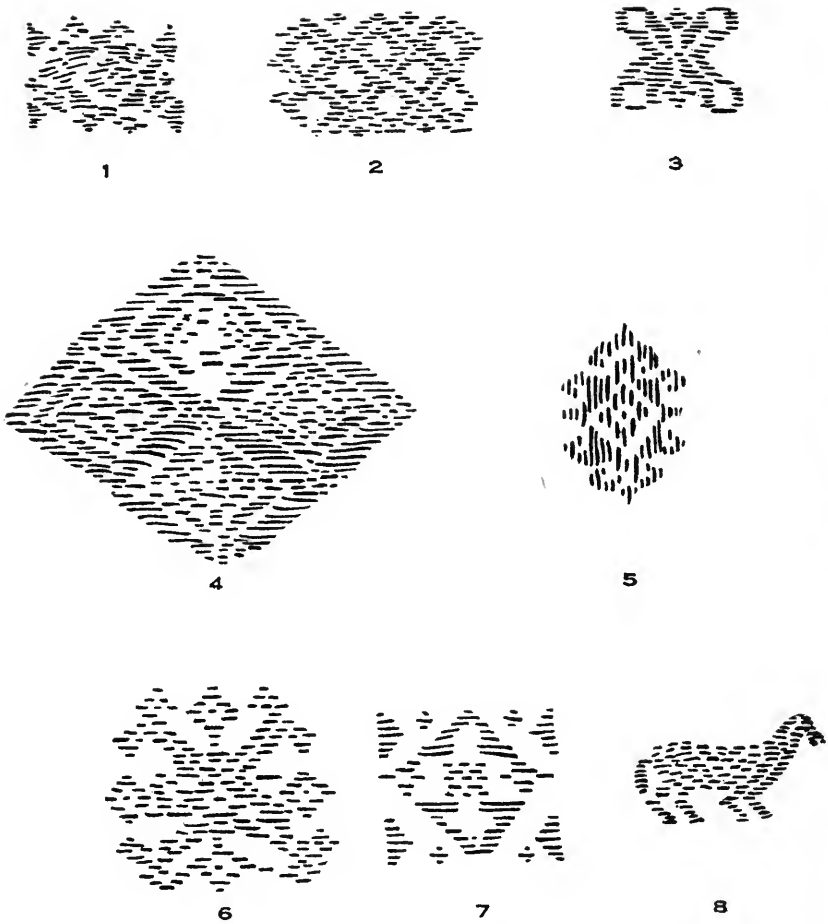
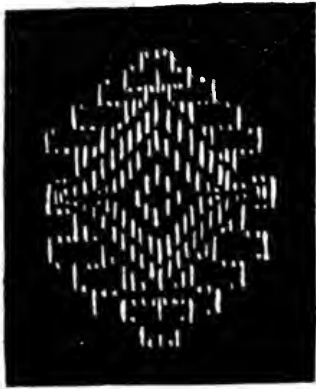
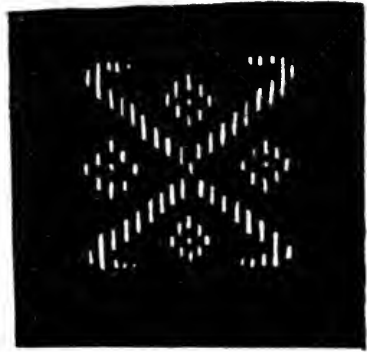


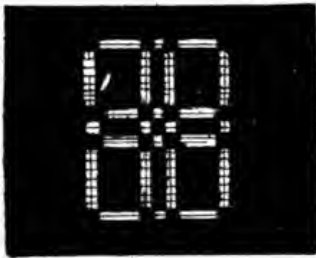
FIG. 24.
PATTERNS USED IN WEAVING.



1



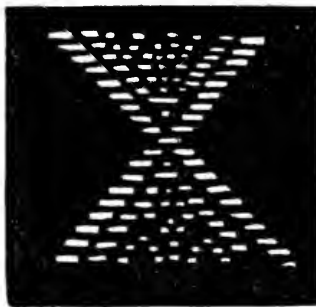
4



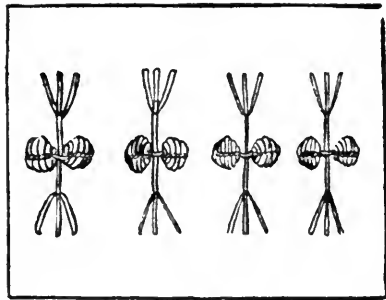
2



5



3



6

FIG. 25.
BLANKET DESIGNS.

In Fig. 25 are five typical patterns taken from blankets, while No. 6 is the ornamental stitching which unites two breadths of cloth, the latter is identified as "fingers and finger nails." No. 1 is the turtle, No. 2 a crab, No. 3 a rice-mortar, No. 4 the bobbin winder shown in Fig. 16, No. 4; No. 5 pineapple.

Plate LXXI is a ceremonial blanket, such as is hung up over the dead. The figures are identified as *a* a deer, *b* horse, *c* carabao calf, *d* man. The textile in Plate LXXII, No. 1 is likewise used chiefly as a ceremonial piece, the designs representing *a* man, *b* horse, *c* star.

A very pleasing blanket is shown in Plate LXXII, No. 2 in which the designs are identified as a rice cake, and *b* as a star, while the whole pattern is known as *kalayan*—the river. The textile in Plate LXXIII, No. 1 imitates a mat, while No. 2 is known as *kosikos*—the circle.

A part of these designs are evidently copies from real objects, others appear to be merely pattern names, while the weavers do not hesitate to borrow any likely patterns which strike their fancy. One quite frequently sees a blanket which shows a "lion," or some other animal or object, with which the people could only become acquainted through pictures or descriptions from outside sources.

In addition to these designs already mentioned, there are certain common types of decoration effected through weaving or embroidery, for which no explanations are given. They are said to be only "to make pretty." Among these are the ends of belts and clouts, as shown in Plate LXXIV, or the raised diamond pattern shown in No. 2 of the same Plate, or the plaid effect in colors, which appear in some of the skirts.

It has already been noted (cf. p. 416) that the weaving methods of the Tinguian are similar to those of the Ilocano, and the same is true of a considerable part of the decorative patterns. The Christianized natives have less of the realistic, a greater variety of geometrical designs, and a greater fondness for bright colors, made possible by the use of aniline dyes, than the mountaineers.

It seems probable that the Tinguian-Ilocano peoples brought the weaving industry with them into northern Luzon, that the Ilocano branch has borrowed improved methods of manufacture, as well as decorative motives from the people with whom they have been in contact through trade. The Tinguian in turn have borrowed from them, but, in the main, they still retain the more primitive methods of weaving, and it is probable their types of ornamentation likewise approximate more closely those in use in earlier times.

XI. PERSONAL ADORNMENT, DANCES, AND MUSICAL INSTRUMENTS

The dress of the man is the clout (*ba-al*), either of beaten bark or of cloth, and a woven belt (*balikes*) in which he keeps small articles (Plates LXXV-LXXVI). On special occasions he wears a long-sleeved jacket (*bado*), open in front, and in a few instances, trousers. Both these garments are recent acquisitions, and the latter, in particular, are not in favor, except where Ilocano influence is very strong. The man is not inclined to adorn himself with brass and gold, neither does he use tattooing to any extent, as do his Kalinga and Igorot neighbors. Some have small patterns on an arm or thigh, but these are usually property marks with which he brands his animals or other possessions. Tattooing as an evidence of a successful head-hunt is not found in this region, nor are there other marks or garments to identify the warriors.

The hair is worn long, and is parted straight down the middle; the two strands are twisted, crossed in the back, then carried to the forehead, where they are again crossed, and the ends are fastened by intertwining on each side of the head. A bark band (*ayabong*) holds the hair in place, but at times it is replaced by a cloth or a narrow ring of interwoven grass and rattan. Round bamboo hats, with low dome-shaped tops, are commonly worn (Plate XLV), but these are sometimes displaced by hats which go to a sharp peak, or by those made of a gourd or of wood.

The woman's hair is parted in the middle, and is combed straight down to the nape of the neck, where it is caught by strings of beads; these are crossed in the back and encircle the head; the strand of hair is then twisted and a loop formed which is carried to the left side, where it is again caught under the beads, near to or above the ear. Most of the Tinguian have luxuriant heads of hair, but, nevertheless, switches are commonly used by both sexes. The hair is often washed with the ashes of rice-straw, or with the bark of the *gogo* tree (*Entada purseta*), and is moistened with coconut oil.

Strings of beads encircle the women's necks, but the typical ornament consists of strands above strands of beads reaching from the wrist to the elbow, and if the wealth of the owner permits, even covering the upper arm as well (Plate LXXIX). The strands are

fastened tightly above the wrist, causing that portion of the arm to swell. Slits of bamboo are usually placed under the beads, and may be removed if the pain or annoyance of the constriction is too severe. The upper arm beads are removed with little difficulty; but those on the forearm are taken off only once or twice a year, when new threads are substituted, or when the owner is in mourning. Beneath these ornaments a delicate fretwork of blue lines is tattooed, so that the woman's arms may not be white and unsightly when she is without her beads.¹

Most of the women have their ears pierced, but in the valley towns only a small proportion wear earrings. In the mountain sections heavy ornaments of gold or copper are worn, the weight often drawing the lobe of the ear far down on the neck.

When at work, the woman discards all clothing from the upper portion of her body, but at other times wears a short-sleeved jacket which reaches to her waist (Plate LXXVII). The waist is cut so low in the neck that the head can pass through. There is no shoulder seam. A straight piece set over the shoulder extends down in square, both front and back, to a line about even with the breast, where it is sewed to the garment proper. A narrow skirt (*dingwa*), with colored border, extends from the waist to the knees. It is held in place by drawing it tightly and then tucking one corner under the upper edge, or by pressing it beneath the girdle (Plate LXXVIII).

When a girl becomes a woman, she dons a girdle (*palingtan*) of braided grass or rattan which fits over the hips, and to which a clout is attached (Plate LXXX). As a rule, the girdle and clout are not removed when bathing, as are the other garments.

The woman seldom wears a hat, except when she is working in the fields, where sunshades large enough to protect the entire body are used (Plate LIV). Frequently a cloth or a skirt is twisted about the head as a protection against the sun.

On chilly mornings one often sees the people covered from head to ankles with their sleeping blankets, or a woman may draw a particularly wide skirt about her body just below the armpits so that she is protected from her breasts to the knees.

¹ This tattooing is accomplished by mixing oil and the black soot from the bottom of a cooking pot, or the pulverized ashes of blue cloth. The paste is spread over the place to be treated, and is driven in with an instrument consisting of three or four needles set in a piece of bamboo. Sometimes the piercing of the skin is done before the color is applied; the latter is then rubbed in.

The teeth of both sexes are blackened with iron salts and tan bark,¹ but they are not cut or mutilated, as is common with many Philippine peoples.

While both sexes are proud of heavy heads of hair, they do not look with equal favor on face and body hairs. These are plucked out either by grasping them between a knife blade and the thumb nail, or with a bamboo device known as *iming*. This consists of a section of bamboo split into several strips at one end. A hair is placed in one end of the slits, and the bamboo is bent into a half circle, causing it to take a firm hold, when it is jerked outwards.

Prized necklaces (*paliget*) made of small strands of twisted silver wire, are placed on the neck of a corpse, and on some occasions are worn by the living. During dances the hair is adorned with notched chicken feathers attached to sticks, while circlets made of boar's tusks are placed on the arms.

DANCES.—Two dances, one ceremonial, the other suitable for all occasions, are very popular.

The ceremonial dance known as *da-eng* takes place at night, and is carried on to the accompaniment of a song.² An equal number of men and women take part. The women form a line facing a similar row of men, about twenty feet distant. Locking arms about one another's waists and with one foot advanced, they begin to sway their bodies backwards and forwards. Suddenly they burst into song, at the same time stepping forward with the left foot. Keeping perfect time to the music, they take three steps toward the men, then retreat to their original positions. The men then take up the song and in a similar manner advance and retreat. This is repeated several times, after which the two lines join to form a circle. With arms interlocked behind one another's backs, and singing in unison, they begin to move contra-clockwise. The left foot is thrown slightly backward and to the side, and the right is brought quickly up to it, causing a rising and falling of the body. The step, at first slow, becomes faster and faster till the dancers have reached the limit of their vocal and physical powers.

The *da-eng* is sacred in character, is danced only at night and then under the direction of the mediums. It is, however, in great favor,

¹ Blackening of the teeth was practised by the Zambal, also in Sumatra and Japan. BLAIR and ROBERTSON, Vol. XVI, p. 78; MARSDEN, History of Sumatra, p. 53.

² See pp. 445, 456 for words and music.

and often so many of the younger people wish to take part that double lines, or two or more groups, may be dancing at the same time. It sometimes happens, when the *basi* has been flowing freely, that the participants become so boisterous and the pace so fast that spectators are run down or the dancers are piled in a heap, from which they emerge laughing and shouting.

The common dance, the *tadek*, is a part of nearly all gatherings of a social and religious nature. The music for this dance usually is made with three *gansas*¹ and a drum. The *gansas* are pressed against the thighs of the players who kneel on the ground. Two of the coppers are beaten with a stick and the palm of the hand, while the third is played by the hands alone (Plate LXXXI, Fig. 2). The stick or left hand gives the initial beat which is followed by three rapid strokes with the right palm. A man and a woman enter the circle, each holding a cloth about the size of a skirt. The man extends his cloth toward the woman, and bringing it suddenly down, causes it to snap, which is the signal to begin. With almost imperceptible movement of the feet and toes and a bending at the knees, he approaches the woman, who in a like manner goes toward him. They pass and continue until at a distance about equal to the start, when they again turn and pass. Occasionally the man will take a few rapid steps toward the woman, with exaggerated high knee action and much stamping of feet, or he will dance backward a few steps. At times the cloth is held at arm's length in front or at the side; again it is wrapped about the waist, the woman always following the actions of the man. At last they meet; the man extends his hand, the woman does likewise, but instead of taking his, she moves her own in a circle about his, avoiding contact. Again they dance away, only returning to repeat the performance. Finally she accepts the proffered hand, the headman brings *basi* for the couple to drink, and the dance is over. The man sometimes ends the dance by the sharp snapping of his cloth, or by putting it on his extended arms and dancing toward the woman, who places her cloth upon his (Plate LXXXI, Fig. 1).

MUSICAL INSTRUMENTS, SONGS, AND DANCES.—The Tinguian is naturally musical. He sings at his work, he beats time with his head-axe against his shield as he tramps the mountain trails, he chants the stories of long ago as the workers gather about the fires each evening of the dry season, he sings the praises of his host at feasts and festivals,²

¹ Shallow copper gongs.

² REYES says that this song, *daleng*, is similar to the *dallot* of the Ilocano (Articulos varios, p. 32).

joins with others in the dirge which follows a burial, and he and many others will sing together as they dance the *da-eng*. But his music does not stop with his vocal accomplishments. In the folk-tales the pan pipe (*dew-dew-as*) occupies a most important place, and to-day the maidens still play them in the evening hours. It is a simple device made of reeds of various lengths lashed together (Fig. 26, No. 1). The player holds the instrument just in front of her lips, and blows into the reeds, meanwhile moving them to and fro, producing a series of low notes without tune.

Another instrument of great importance in the legends is the nose flute (*kalaleng*). This is a long reed with holes cut in the side, to be

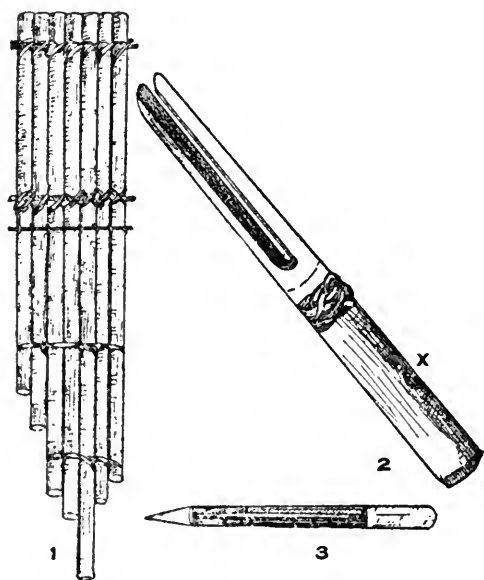


FIG. 26.
MUSICAL INSTRUMENTS.

stopped by the fingers in producing the notes. The player closes one nostril with a bit of cotton, and then forces the air from the other into a small hole cut in the end of the tube. The instrument is popular with the men, and often one can hear the plaintive note of the nose flute far into the night (Plate LXXXII).

The mouth flute (*tulali*) is similar to that found in civilized lands, but is constructed from a reed.

A peculiar device used solely by the women is the *bunkaka* (Fig. 26, No. 2). This consists of a bamboo tube with one end cut away so

as to leave only two thin vibrating strips. These, when struck against the palm of the left hand, give out a note which can be changed by placing a finger over the opening at x.

A Jew's harp is constructed like a netting needle, but with a tongue of bamboo cut so that it will vibrate when struck, or when a cord attached to the end is jerked sharply (Fig. 26, No. 3). If made of bamboo, the instrument is known as *kolibau*; if brass, *agiweng*. It is often mentioned in the tales, and to-day is played by nearly all the men.

Bamboo guitars (*kuliteng*) are made by cutting narrow strips throughout the length of a section of bamboo, but not detaching them at the ends. They are raised and tuned by inserting small wedges of wood at the ends. Small sections of thin bamboo are sometimes fitted over two strings, and are beaten with sticks, or the strings can be fingered like a guitar (Plate LXXXIII).

Music for dances is furnished by an orchestra consisting of four men, three with copper gongs (*gangsas*), and one with a drum. The gongs are tambourine shape, with sides about an inch and a half high. They are placed against the thighs of the players who kneel on the ground, and are beaten with a stick and the palm of the hand or by the hands alone.¹ They doubtless came into this region through trade, but at a time so remote that their origin is now credited to the spirits. The drum (*tambor*) is made of a short section of a tree hollowed out. The ends are covered with cow's hide or pig's skin.

¹ Similar instruments are used by the Igorot who suspend them free and beat them as they dance.

XII. MUSIC

INTRODUCTION.—That the songs might be delivered as nearly as possible at the same pitch which the singers used when making the records, investigation was made as to the usual speed used by manufacturers while recording. It was found to be 160 revolutions per minute. Accordingly the phonograph was carefully set at this speed during transcription.

In determining the keys in which to transcribe the various songs, the pitch-pipe used was that of the "International," which was adopted at the Vienna Congress in Nov. 1887. This congress established $c^2=522$ double vibrations per second. All the records proved to be a shade flat by this standard, but were found to be almost exactly in accord with an instrument of fixed pitch, which in turn was found to be approximately eleven beats at variance with the pitch-pipe on c^2 .

Assuming that the recording and transcribing speeds of the machines were the same, this would place the original singing almost exactly in accord with the old "philosophical standard of pitch" which places c^2 at 512 double vibrations per second. Though the singing was not always in perfect accord with the notes set down in transcriptions, with the exception of those very marked departures especially indicated in the music, the variations were so slight that, so far as true intonation goes, the performances were fully up to the standard of those of the average natural singer.

Special ear tubes were used while transcribing the records, and resort made to a special device wherewith any order of whole, or even part measures could be consecutively played. Thus it was possible to closely compare parts which were similar in either words or music.

In some of the records two or more voices can be distinguished singing in unison. Such unisons are shown in the transcription by single notes. No attempt has been made to indicate the several voices. But when such single notes are shown accompanied by the word "solo," it is to be understood that all of the performers have dropped out but one, probably the leader. When the voices split up into parts, it is so notated in the music.

Primitive people display more or less timidity in giving their songs for scientific purposes. Such timidity is especially apt to be

manifested in their attacks. In the *Da-eng*, Girls' Part (Record J), the delayed attack at the beginning of each new verse is very marked. The delay varies considerably from verse to verse, as indicated by the number of beats rest shown at the ends of the lines. Similar pauses are found in the Boys' Part of the same ceremony (see Record A). These beats rest or pauses are not to be taken as part of the legitimate rhythm, for it is more than likely that if the singers were giving their songs in their regular ceremonial and the performers unconscious of observation, these pauses would not occur.

In transcribing those songs which have several verses on the record, the notation has been so arranged on the page that the measures line up vertically, making comparison easy between corresponding measures of the different verses.

To indicate peculiar qualities, special signs are used in connection with the regular musical symbols. The table which follows shows these signs and also lists the qualities for which they stand. Some of these qualities could have been represented by regular musical symbols, but it was thought best to use the special signs to make them stand out more prominently. The qualities thus indicated as well as those which are represented by the regular musical notation will be found listed and defined after the tabulation of qualities.

Unusual qualities and their special signs

Muted or Dying Tones	↓	Downward Glissandos	—
Falsetto Tones	°	Upward Glissandos	/
Inhaled Tones	⊙	Swelled Tones	⟨⟩
Jog	~	Pulsated Tones	.....

RECORD A

DA-ENG

Sung while dancing in a religious ceremony. (Boys' part.)

♩ = 88 to 92

Yom ma yom - ta — yom ma yom — ag dag da gi yo ma yom

ma sa nas — ta — ma sa nas — ag dag da gi — na sa - nas

The musical score consists of eight staves. The first two staves contain the vocal melody with lyrics. The remaining six staves provide a piano accompaniment. The key signature is two flats (B-flat and E-flat), and the time signature is 3/4. The music features various rhythmic patterns, including triplets and accents, and concludes with a double bar line.

A single staff showing a pentatonic scale in the key of B-flat major (two flats). The notes are B-flat, C, D, E-flat, and F, followed by a repeat sign.

Pentatonic scale in which the song is cast.

RECORD B

DIWAS

Sung at night by the friends of a sick man.

 $\text{♩} = \text{about } 72$

(no well defined meter)

accelerato ----- Rit. atempo

Solo -----

Both voices

Rapidly in talking style

Solo -----

Both voices

RECORD C

SANG-SANGIT

Sung during the evening following a funeral

 $\text{♩} = 96$

Recitative

bellowing

Minor scale in which the song is cast

RECORD D

DAWAK

$J = 76$ The song of a medium when calling spirits into her (his) body.



$J = 184$

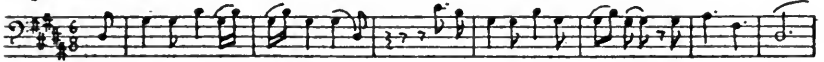


$J = 112$



$J = 104$

$J = 132$



$J = 108$

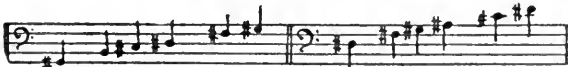
$J = 116$



$J = 84$



Pentatonic Scales



C# minor, relative of B major.
In which the song is cast. ~

D# minor, relative of F# major.
To which it temporarily shifts. ~

RECORD E

SONG OF A SPIRIT

♩ = 104

Sung by a medium when possessed by a spirit.

The musical score consists of ten staves of music. The key signature is B-flat major (two flats). The time signature is 2/4. The score includes various musical notations such as slurs, accents, and dynamic markings. The tempo is marked as ♩ = 104. The score is divided into sections with tempo markings of ♩ = 168 and ♩ = 132. The music features complex rhythmic patterns and melodic lines.

♩ = 104

♩ = 168

♩ = 132

RECORD F

SONG OF A SPIRIT

Sung by a medium when possessed by a spirit.

$\text{♩} = 108$

The musical score consists of seven staves of music. The first staff begins with a treble clef, a key signature of one sharp (F#), and a common time signature (C). It features a melodic line with a long note followed by a series of sixteenth notes. A slur covers the first two staves. The second staff includes a tempo marking $\text{♩} = 80$ and a fermata over a note. The third staff has a slur and a triplet of eighth notes. The fourth staff continues with a slur and a triplet of eighth notes. The fifth staff features a triplet of eighth notes. The sixth staff has a triplet of eighth notes. The seventh staff has four triplet markings over eighth notes.

RECORD G

BAGOYAS

A song of praise and compliment sung at a feast or party.

♩ = 160

The musical score for 'BAGOYAS' is written in a single system with ten staves. The key signature is two flats (B-flat and E-flat), and the time signature is 2/4. The tempo is marked as ♩ = 160. The score includes various musical notations such as slurs, accents, and dynamic markings. The lyrics 'Green. Green.' are written below the second staff. The score is annotated with numerous performance instructions, including 'm.m. 1.', 'm.m. 2.', 'm.m. 3.', 'v.m.', 'A', and '3'. The piece concludes with a double bar line and a repeat sign.

RECORD H

BALALOGNINMAS

$\text{♩} = 138$

RECORD I

DA-ENG

$\text{♩} = 69$

Sung while dancing in a religious ceremony. (Boys and girls alternating.)

$\text{♩} = 80$

- 2nd Part -

Pentatonic scale in which the song is cast.

RECORD J

DA-ENG

Sung while dancing in a religious ceremony. (Girls' part)

♩ = 96-108

Ma li — dom ag dag da — gi yo ma — yo-m mala mala — nas ag dag da gi na — sa nas

Ma la — nas ag dag da — gi yo ma — yo-m mala mala — nas ag dag da gi na — sa nas



Minor scale in which the song is cast

RECORD K

BOGOYAS

Sung by a woman

♩ = 104

Question Answer Answer Answer

Question Answer / Question

Answer Answer

RECORD L

NA-WAY

♩ = 88 Sung at the celebration which closes the period of mourning for the dead.

The musical score for 'NA-WAY' consists of six staves of music. The first staff is the melody, written in treble clef with a key signature of one sharp (F#) and a 3/4 time signature. The tempo is marked as ♩ = 88. The music is characterized by a slow, steady pace with a mix of quarter and eighth notes, often grouped in pairs. The subsequent five staves provide accompaniment, featuring chords and rhythmic patterns that support the melody. The notation includes various musical symbols such as slurs, ties, and dynamic markings.

Pentatonic Scales

This section displays three pentatonic scales on a single staff in treble clef. The first scale is B minor, consisting of the notes B, C, D, E, and F. The second scale is E minor, consisting of the notes E, F, G, A, and B. The third scale is D major, but with a G major tonality, consisting of the notes D, E, F#, G, and A. Each scale is shown as a sequence of notes with stems, followed by a double bar line.

Japanese Koto Tunings

This section shows two Japanese Koto tunings on a single staff in treble clef. The first tuning is HYOJŌ - Ritsusen (female or minor), with notes corresponding to the scale B, C, D, E, F. The second tuning is SUIJŌ - Ryosen (male or major), with notes corresponding to the scale D, E, F#, G, A. Each tuning is represented by a sequence of notes with stems, followed by a double bar line.

RECORD M

DANG-DANG-AY

♩ = 104

Sung by women while pounding rice out of straw and husks.

The first part of the musical score consists of five staves of music. The first staff begins with a treble clef, a key signature of one flat (B-flat), and a 4/4 time signature. It features a melody with several triplet markings (indicated by a '3' over the notes) and a fermata over the first triplet. The subsequent staves continue the melody, with various rhythmic patterns and some chromaticism. The fifth staff ends with a double bar line.

♩ = 104 Swing changes.

The second part of the musical score consists of three staves of music. The first staff begins with a treble clef, a key signature of one flat, and a 4/4 time signature. It features a melody with several triplet markings and a fermata. The second staff continues the melody with more triplet markings. The third staff concludes the piece with a double bar line and some final rhythmic flourishes.

RECORD N

KUILAY - KUILAY

Sung by women while passing liquor.

$\frac{6}{8}$ $\frac{2}{4}$ } = 92

The musical score consists of eight staves of music. The first staff begins with a treble clef, a key signature of one flat (B-flat), and a complex time signature of 6/8, 2/4, and 3/8. A tempo marking of 92 is indicated. The music features a variety of rhythmic patterns, including eighth and sixteenth notes, and rests. A fermata is placed over a note in the first staff. The second staff continues the melody with similar rhythmic motifs. The third staff is marked 'spoken-muted' and includes the instruction 'Temporarily in two flats...'. The fourth staff begins with a dotted line and a fermata. The fifth staff continues the melody. The sixth staff features a '2' above the first measure and a '3' above a triplet. The seventh staff has a '3' above a triplet. The eighth staff ends with a 'muted' marking under a note.

* Semitones sung

WORDS OF THE DA-ENG

PART I. Sung in line.¹

1. Ma-li-dom ag-dag-da-gī yo-ma-yom
Yom-ma-yom ta yom-ma-yom ag-dag-da-gī yo-ma-yom.
2. Ma-la-nas ag-dag-da-gī na-sa-nas
Ma-sa-nas ta ma-sa-nas ag-dag-da-gī na-sa-nas.
3. Sī On-na-ī in-no-bi-yan kī-not-ko-tan Na-to-tan
Na-to-tan ta na-to-tan kī-not ko-tan na-to-tan.
4. Kol-kol-dong sī gī-nol-bat nga ag-moli-moli-yat
Mo-li-yat ta mo-li-yat ag-mo-li mo-li-yat.
5. Ka-lan-tag kal-la-yan-nen ag-ka-īdig-na-yan
dig-na-yan ta dig-na-yan ag-ka-ī dig-na-yan.
6. A-na-on sī Tak-la-yan na-is-ti-lo ai bolo
Bin-no-lo ta bin-no-lo na-is-ti-lo ai bo-lo.
7. Sok-bot nī ka-bin-bin-an adī ma-sil-si-li-ban
sī-li-ban ta sī-li-ban adī ma-sil-si-liban
8. Ba-gai-ba-yem dem-ma-nngen sī-nol-bo-dan nī kolat.
kī-no-lat ta kī-no-lat ai ag-kī-no kī-no-lat.
9. Sabak nī am-mo-ga-wen mimog-go-mog dī-kai-wen
dī-kai-wen ta kī-kai wen mimog-go-mog dī-kai-wen.
10. Sabak nī an-na-a-wen mī-ka-li-ya li-ya-wen.
Lī-ya-wen ta li-ya-wen ai ag-li-ya li-ya-wen

PART II. Sung in line.

1. alin-to-bo nī nī-og ag-lam-pī-yok
lam-pī-yok ta lam-pī-yok ag-lam-pī lam-pī-yok.
2. al-in-to-bo nī aba ai adī nag-pada
pī-na-da ta pī-na-da ai adī nag-pa-da.
3. al-in-to-bo nī no-nang ag-ba-lī ba-lī-yang
ba-lī-yang ta ba-lī-yang ai ag-ba-lī ba-lī-yang.
4. al-in-to-bo nī lamai um-al-ali ma-ya-mai
ma-ya-mai ta ma-ya-mai umal ali ma-ya-mai.
5. al-in-to-bo nī bang-on ag-ba-la ba-la-ngon
ba-la-ngon ta ba-la-ngon ag-ba-la ba-la-ngon.
6. al-in-to-bo nī oway pēl-sa-tem ket i-nom-lai
i-nom-lai ta i-nom-lai pēl-sa-tem ket i-nom-lai.
7. al-in-to-bo nī oling bog-yo-ngem ket boom-li-sing
boom-li-sing ta boom-li-sing bog-yo-ngem ket boom-li-sing.
8. al-in-to-bo nī ba-kan umal ali ka-na-kan
ka-na-kan ta ka-na-kan umal ali ka-na-kan.
9. al-in-to-bo nī anis ai adī na-gī-nīs
gī-nī-nīs ta gī-nī-nīs ai adī nedey na-gī-nīs.

¹ The first line is sung by the girls, the second by the boys. For the music see p. 445.

PART III. Sung as they dance in circle.

1. A-ya-mem sī pa-nī-kī ag-sol-sol-wap sī la-bī
nī la-bī ta nī labi ag-sol-sol-wap sī la-bī.
2. A-ya-mem sī bat-ta-teng ag-tīya tī ya-deng
tī-ya-deng ta tī-ya-deng ag-tī-ya tī-ya-deng.
3. A-ya-mem sī bang-nga-an nga dum-ang-dang-lap sī da-lan
din-na-lan ta din-na-lan dum-ang-dang-lap sī da-lan.
4. A-ya-mem sī om-om-bek nga ag-ma-sī ma-sim-bek
sī nim-bek ta sī-nim-bek nga ag-ma-sī ma-sim-bek.
5. A-ya-mem sī po-na-yen nga omas-asī gai-ga-yen
gai-ga-yen ta gai-ga-yen om-as asi gai-ga-yen.
6. A-ya-mem sī la-ga-dan nga tomal-la tal-la-dan
tal-la-dan ta tal-la-dan nga ag-ta-la tal-la-dan.
7. A-ya-mem sī bal-ga-si nga agka-a ka-a-sī
ka-a-sī ta ka-a-sī nga ag-ka-a ka-a-sī.

PART IV.

1. Bwa dī la-od to-mo-bo nga lo-mok-bot
lo-mok-bot ta lo-mok-bot to-mo-bo wa lo-mok-bot.
2. Bwa dī Ba-lī-la-sī-bīs nga gī-i-tem ket ma-i-mīs
i-nī-mīs ta i-nī-mīs gī-i-tem ket ma-i-mīs.
3. Bwa dī Mal-la-pa-ai gī-i-tem ket tom-ga-ey
tE-ga-ey ta tE-ga-ey gī-i-tem ket tom-ga-ey.
4. Bwa dī Mal-lo-sa-ak gī-i-tem ket tom-ga-ak
tE-ga-ak ta tE-ga-ak gī-i-tem ket tom-ga-ak.
5. Bwa dī Tom-mo nga kom-ma-lab ket tom-mo-bo
tom-mo-bo ta tom-mo-bo kom-ma-la-lab ket tom-mo-bo.

PART V.

1. Adī yo pai lau-lau-den lawed-ko nga do-la-wen
do-la-wen ta do-la-wen adī yo pai lau-lau-den.
2. La-wed ngaita dī al-yo pang-lau-lau-dan ta ba-o
bī-na-o ta bī-na-o pang-lau-lau-dan ta ba-o.
3. La-wed dī po-dok pang-lau-lau-dan ta bo-kod
bī-no-kod ta bī-no-kod pang-lau-lau-dan ta bo-kod.
4. La-wed dī Sab-lang, pang-lau-lau-dan ta ba-sang
bī-na-sang ta bī-na-sang pang-lau-lau-dan ta ba-sang.
5. La-wed dī Pa-wai pang-lau-lau-dan ta a-wai
in-na-wai ta in-na-wai pang-lau-lau-dan ta a-wai.

PART VI.

1. Ka-wa-yan dī Po-da-yan na-tong-dan ta na-tong-dan
na-tong-dan ta na-tong-dan ka-wa-yan dī Po-da-yan.
2. Ka-wa-yan dī Bal-li-weyan om-mī-weyan
Om-mī-weyan ta om-mī-weyan ka-wa-yan dī Bal-li-weyan.
3. Ka-wa-yan dī Ba-ta-an ko-ma omi-na-lan
i-na-lan ta i-na-lan ka-wa-yan dī Ba-ta-an.
4. Sol-kod-ko nga ka-wa-yan na-kak-la-ang dī dem-mang
dī dem-mang ta dī dem-mang na-kak-la-ang dī dem-mang.
5. Kawayan dī Pa-la-i ag-ka-i dong-la don-la-li
dong-la-li ta dong-la-li ag-ka-i dong-la dong-la-li.

PART VII.

1. Da-num di la-od kom-mog-nod ket kom-mog-nod
Kom-mog-nod ta kom-mog-nod danum di la-od.
2. Dagsi-yan di Pa-la-wang ko-ma ta sum-mi na-wang
si-na-wang ta si-na-wang ko-ma ta sum-mi-na-wang.
3. Dagsi-yan di Langiden mi-ka si-li si-li-ten
sili-ten ta si-li-ten dag-si-yan di Lang-i-den.
4. Dagsi-yan di Ka-ba-lang-gan na-kal kalong go-kong-an
ga-kong-an taga-kong-an na-kal ka-long ga-kong-an.
5. Danum di Pa-da-ngi-tan ki-na-dang ta ka-witan
ka-wi-tan ta ka-wi-tan ki-na-dang ta ka-wi-tan.
6. Dag-si-yan di Lai-og-an nan-gol la-ol la-yo-san
la-yo-san ta la-yo-san o-mal-la al-lo-yo-san.
7. Danum di Abang sum-mol-wai ta sum-mol-wai
Sum-mol-wai ta sum-mol-wai da-num di A-bang.
8. Danum di Abas inum-bas ket inum-bas
inum-bas ta i-num-bas da-num di A-bas.
9. Danum di Ba-ai nag-kat-lo nga sa-long-ai
Sa-long-ai ta sa-long-ai nag-kat-lo nga sa-long-ai.
10. Danum di Da-ya nag-kil-la-yos nga si-pa
Si-ni-pa ta si-ni-pa nag-kil-la-yos nga si-pa.
11. Danum di ngato ti-nung-dai ta a-nito
A-nito ta a-nito ti-nun-dai ta a-nito.
12. Danum di aging ti-nung-dai ta ka-la-ding
Ka-lad-ing ta ka-la-ding ti-nung-dai ta ka-la-ding.
13. Danum di A-yeng ti-nung-dai ta ba-yeng-yeng
ba-yeng-yeng ta ba-yeng-yeng ti-nung-dai ta ba-yeng-yeng.
14. Adi ka-pai man-gi-mon na-sal-li-bon ai bo-bon
bin-no-bon ta bin-no-bon na-sal-li-bon ai bo-bon.

APPROXIMATE TRANSLATION OF THE DA-ENG¹

I.

1. ?
2. The Malanus flows.
Flows, flows, flows onward.
3. Si (Mr.) On-na-i and Na-to-tan dig obi (taro) with their hands.
Dig, dig, dig with the hands.
4. The firefly in the woods opens his eyes.
Opens, opens, opens his eyes.
5. The bank caves into the river.
Caves, caves, caves in.
6. Here, your arm pretty bamboo (?)
Bamboo, bamboo, pretty bamboo.
7. Do not disturb the rest of the kabibinan (a bird).
Disturb, disturb, do not disturb.
8. Help the kolat (a plant) to grow.
Become kolat, become kolat, stir up to become kolat.
9. The flower of the Amogawen falls on you.
On you, on you, falls on you.

¹ The first line is sung by the girls, the second by the boys.

10. The flower of the Ana-an plays with you.
Plays, plays, it plays.

II.

1. The young leaves of the coconut wave.
Wave, wave, they wave.
2. The leaves of the aba are not alike.
Alike, alike, are not alike.
3. The leaves of the nonang turn back and forth.
Back and forth, back and forth, turn back and forth.
4. The leaves of the lamay quake.
Quake, quake, they quake.
5. The leaves of the bangon arise(?).
Arise, arise, they arise.
6. The leaves of the rattan cut and twist.
Twist, twist, cut, and twist.
7. The leaves of the oling rustle and rattle.
Rattle, rattle, rustle and rattle.
8. The leaves of the bakan fall before time.
Fall, fall, fall before time.
9. The leaves of the anis (a low shrub) are not clean.
Clean, clean, not clean.

III.

1. You play Mr. bat who fly by night.
Night, night, fly by night.
2. You play grasshopper whose back is concave.
Concave, concave, whose back is concave.
3. You play Bang-nga-an who shines like gold by the trail.
By the trail, by the trail, shines like gold by the trail.
4. You play onombek who hiccoughs.
Hiccough, hiccough, who hiccoughs.
5. You play dove who falls.
Falls, falls, who falls.
6. You play lagadan (a bird) who flees(?).
Flees, flees, who flees.
7. You play balgasi (?) who mourns for the dead.
Mourns, mourns, mourns for the dead.

IV.

1. Betel-nut of the west which grows up like the gourd.
Grows up, grows up like the gourd.
2. Betel-nut of Balasibis which smiles when it is cut. (Literally—is cut and smiles.)
It smiles, it smiles, is cut, and smiles.
3. Betel-nut of Malapay which chuckles (like a woman) when it is cut.
Chuckles, chuckles, is cut, and chuckles.
4. Betel-nut of Malosak which laughs (like a man) when it is cut.
Laughs, laughs, is cut, and laughs.
5. Betel-nut of Tomo which climbs and grows.
Grows, grows, climbs, and grows.

V.

1. Do not take the leaves of my lawed, who am rich.
Rich, rich, do not take lawed leaves.
2. The widower takes often the top (best) lawed of Alyo.
The widower, the widower, the widower takes often.
3. The lawed of the wooded hill the widow takes often.
The widow, the widow, the widow takes often.
4. The lawed of Sablang the maiden takes often.
The maiden, the maiden, the maiden takes often.
5. The lawed of Paway the hermit (country man) takes often.
The hermit, the hermit, the hermit takes often.

VI.

1. Bamboo of Podayan, ever living, ever living.
Ever living, ever living, bamboo of Podayan.
2. Bamboo of Baliweyan sigh (literally "go wey"). when the wind blows.
Sigh, sigh, bamboo of Baliweyan.
3. Bamboo of Bataan, like the sunshine.
Sunshine, sunshine, bamboo of Bataan.
4. My cane of bamboo gives out a clang.
Clang, clang, gives out a clang.
5. Bamboo of Palai wave up and down.
Wave, wave, wave up and down.

VII.

1. Water of the west, become less and less.
Less, less, water of the west.
2. Spring of Palawang overflow.
Overflow, overflow, be like the overflow.
3. Spring of Langiden flow fast. (Literally "like lightning".)
Flow, flow, spring of Langiden.
4. Spring of Ka-ba-lang, flow like a chain.
Chain, chain, flow like a chain.
5. Water of Padangitan be knee deep to the rooster.
Rooster, rooster, knee deep to the rooster.
6. Spring of Layogan flow on.
Flow, flow, flow on.
7. Water of Abang (?)
?
8. Water of Abas, become dry.
Become dry, become dry, water of Abas.
9. Water of Ba-ay has three branches.
Branches, branches, has three branches.
10. Water of the East shaped like a ball.
Ball, ball, shaped like a ball.
11. Water from above the anito holds (stops).
Anito, anito, the anito holds.
12. Water of the uninhabited place the ghost holds.
Ghost, ghost, the ghost holds.
13. Water of Ayeng the bamboo tube holds.
Bamboo tube, bamboo tube, the bamboo tube holds.
14. Do not be jealous, pretty spring.
Spring, spring, pretty spring.

DA-ENG. Boys' part.

Record A. Sung while dancing in a religious ceremony.

There are at least two voices in this record. Possibly there were three or more singers taking part, though it is not possible to distinguish more than two.

The song is cast in the pentatonic scale of A major. The notes G[♯] and D[♭] do not belong to this scale. At those places where they are put down in the notation, they are used to better define the glissandos. The singers pass over them rapidly, sliding from the topmost note of the group to the lowest with no perceptible dwelling on any of the intermediate tones. The glissandos are indicated by straight lines drawn obliquely underneath such groups (see DEFINITION OF QUALITIES, p. 478).

In each of measures 2 and 6 of verses 1, 2, and 3; and in measure 6 of verse 4, is shown a group of three notes with an asterisk above. These groups, as shown in the notation, are B, A, G; but in measure 2 of verse 4, the corresponding group is C, B, A. In those measures marked *, the singers are very plainly striving to reach the tones C, B, A. There is that quality of tension in the voices with the accompanying forcing of tone which is peculiar to untrained singers striving for a tone near the limit of their highest range. As the tones actually sounded are neither B, A, G, nor C, B, A, but are instead a sort of compromise between the two, it is quite evident that the succession intended in each of the seven measures is the same as in the eighth or odd one, viz. C, B, A. If we assume this to be the case, it eliminates seven of the foreign G naturals shown in the notation. If, however, this conjecture is wrong, and the performers really feel that the groups in question all start on B, then the G naturals are eliminated by the glissandos. The only other G[♯] is shown in measure 7 of verse 4. By comparing this measure with the corresponding measure in each of the other three verses, it will be seen that the singers have taken great pains in those verses to avoid this note which does not belong to the pentatonic scale which they are using,—evidence that they do not sense the tone in the fourth verse, where it is taken glissando. The D[♭], also foreign to the scale, occurs but once. It is in measure 3 of the top line. The glissando here eliminates this tone also, but, by comparing this measure with the corresponding measure of each of the other verses, we find the same avoidance as in the case of the G[♯],—evidence that the performers do not sense this other foreign tone. The song is therefore very markedly pentatonic in character.

The assumption that the seven groups marked with asterisks do not represent the real intent of the singers, is based entirely on the "stress" heard in the record. This "stress" cannot be represented in notation. Relying on the notation alone, one would be warranted in drawing a contrary conclusion and assuming that the odd measure should be made to conform to the other seven and all read, B, A, G; or, from the phonographic record, one might assume that the compromise, previously mentioned, was the intonation really intended. Primitive peoples frequently do sing and play, quite intentionally, tones out of conformity with scale tones of present-day concert music. Such tones cannot be represented by our musical notation without resort to special signs. This is not necessary in the present case, as the falling short of true intonation does not appear to be from deliberate intent on the part of the singers, but seems to be due to lack of ability.

In eight of the measures, at least one of the voices departs from the melody proper, producing the harmony-intervals so frequently heard in the music of primitive peoples, namely, that of a 5th without the 3rd to complete the triad, and that of a 4th without the 6th to complete the chord. Such thirdless 5ths are found in measures 5 (verse 1), 1 and 8 (verse 2), 5 (verse 3), and 1 and 5 (verse 4); and the interval of a 4th without the 6th is found in measures 3 and 8 of verse 4. In the last measure of the notation, however, the interval of a 4th there shown is caused by the leader's voice departing from the regular melodic succession instead of the accompanying voice or voices, as is the case in each of the other measures mentioned.

In measures 1 and 5 of each of the four verses of the song, and also in measure 3 of the second verse, the sign, "....." (mezzo staccato marks), is used to indicate the pulsating of the voice of one of the singers, probably the leader, marking the rhythm of the song.

The metronome tempo is mostly 88, but varies at times and runs as high as 92 per minute in the last half of the 4th verse.

Between verses 2 and 3 the phonograph shows that the singers paused eight beats (two whole measures), and between verses 3 and 4 there was a similar, though shorter, pause of two beats (one-half measure). These pauses are not shown in the notation.

There was no special change in dynamics throughout the song except as indicated by the sforzando marks in measures 1, 2, 5, 6, 7, and 8 of verse 4.

In general character this song resembles most the *Dang-dang-ay* (Record M).

DIWAS

Record B. Sung at night by the friends of a sick man.

There are two singers on this record, both men with bass voices. One seems to be the leader, the accompanying singer dragging along behind. As the tempo is very slow and many of the tones long drawn out, this uncertainty on the part of the second performer is not so noticeable, except on the quick runs as the leader passes to another principal tone.

The song is cast in the natural minor scale of D. The E^b near the beginning of the second line does not belong to the scale. It is not well defined on the record, and so is indicated in the transcription with an interrogation-mark beneath.

Although not confined to the intervals of the pentatonic scale, the number is distinctly pentatonic in character. It is made up mostly of the tones A, C, D, and E. These tones belong to the pentatonic scales of C major and its relative minor A. In tonality, the song cannot be considered as belonging to either of these keys, as there is a very distinct feeling of B^b in it, notwithstanding that the tone is seldom dwelt upon, but passed over quickly, almost glissando, in nearly every place where it occurs.

The song ends on A. This is not the key note, however, but is the fifth of the key.

The song is like a mournful chant. Throughout there is a peculiar wailing which leaves a strange, haunting impression. The music admirably suits the hour when it is used. It would be decidedly incongruous given in broad daylight. These untutored savages could hardly have conjured up a more typical tone-picture of the "shadowy valley" than the song heard on this record.

The peculiarly weird character is due in large part to the swelling out and dying away of the tones on certain syllables. (For comparison to effects found in Igorot music, see "Swelled Tones" under DEFINITION OF QUALITIES, p. 479).

SANG-SANGIT

Record C. Sung during the evening following a funeral.

In this record we hear but one voice—a man's. The song is cast in the minor scale of G, but whether the natural minor or the harmonic, cannot be determined, as the singer does not use the 7th of the scale. It is not pentatonic in character.

The song is given in the recitative style. There are several verses

which vary but little in the music, except for the changes in the reiterated staccato tones which are made greater or less in number to accommodate the difference in number of syllables. With the exception of those starting the glissandos or trills, the repeated tones were given with a very decided staccato punch.

Much of the intonation is vague. In taking the glissandos shown near the middle of the top line, the upper tone is sung about half way between B^b and Bⁿ. There is some abandon in the rhythm also.

The group of six notes marked with an asterisk are trilled on the semitone interval.

DAWAK

Record D. The song of a medium when calling spirits into her (his) body.

This song is doubtless the invention of the singer. It has that abandon which usually characterizes the songs of workers in the occult among primitive folk.

The song is cast mostly in the relative minor (G[#]) of the pentatonic scale of Bⁿ major. A[#] does not belong to this scale. There are five measures, where this note appears, but in each instance the tonality of the phrase momentarily rests in D[#] minor, the relative of the pentatonic major of F[#]. A[#] belongs to this scale, but Bⁿ does not. The singer, with his instinct for the five-note scale, avoids the Bⁿ until the tonality shifts back to the original key. The song is therefore classed as pentatonic in character.

The melody is distinctly harmonic in structure, as nearly all of the successions are made up of triad intervals.

Though the song runs but a minute and a half, the tempo changes eight times. The performer takes nearly every new tempo with a well-defined rhythm. There is considerable freedom shown in the first movement when the tremolos between Bⁿ and the G[#] below are taken.

The singer shows quite remarkable flexibility of voice, excellent breath control, and a rather surprising quality of tone and accuracy of intonation. As a demonstration of flexibility, about the middle of the first movement, he takes the quarter note Bⁿ in falsetto and immediately drops into the waver a tenth below, at the same time assuming his natural voice. The falsetto tone is indicated in the transcription by a tiny circle above the note. All of the wavered tones, as well as the falsetto at the beginning and the turn at the end are sung with one breath to a single syllable. This is quite a remarkable performance considering that the singer had no voice training.

Near the opening of the first 2/4 movement is shown a group of five notes given in the time of four,—a rhythmic effect few trained musicians can execute well.

Of the various performers who took part in making the fourteen records, this singer shows the best voice technic and control.

The fact that the singer scarcely repeats a single motive throughout the extent of the song, but is constantly introducing new tonal ideas argues an extempore performance. It would be interesting to have for comparison another record of the same song made at another time.

SONG OF A SPIRIT

Record E. Sung by a medium when possessed by a spirit.

Melodically this song is quite in contrast with the *Dawak*. This one is distinctly melodic in structure, though there are suggested harmonies. These harmonies are mostly tonic and dominant alternating one with the other.

Using a two-measure motive, which he announces at the very start, the singer works the material over and over, first in one harmonic mode and then in the other, frequently changing the form of the motive through embellishments or altered metric values, but always leaving an impression which harks back to the original motive.

Arrange the various tones of this melody in any order that we will, we cannot make them conform to any diatonic scale used in modern music. If, however, we ignore the C^b , which occurs twice in the song, it gives us an incomplete ascending melodic-minor scale in D^b . But the song is not minor in mode. It is distinctly major in tonality. It is formed mostly of the four tones D^b , E^b , A^b , and B^b . All of these belong to the pentatonic major scale of D^b . This gives a very marked pentatonic flavor, yet the song is not in the pentatonic scale, for the singer introduces half steps, and there are no such intervals in the pentatonic scale.

Casting about among the scales used by various peoples, the nearest approach I find to the tonal succession of this song is one of the numerous scales or "tunings" used by the Japanese. It is that known as the "Hirajoshi." To make comparison easy, I have transposed this Japanese koto-tuning into the same key as that of the song. Along with it I show the tonal material of the Tinguian song arranged in corresponding sequence.



It will be seen that every note in the Japanese scale is found also in the Tinguian, though not always in the same octave. All of the Tinguian tones are found in the Japanese scale except the C^b and D^b . These exceptions are shown with their stems turned down. The notes shown in white in the Tinguian scale are not sung at the pitch indicated, but occur in the song as octaves of these tones. The black notes therefore show the actual tones sung. It will be noticed that in the arrangement of the notes the opening tone is repeated a few notes later on. This is because the Japanese usually tune the koto with the first and fifth strings in unison to facilitate the execution of certain passages in their music.

The "Jog," heard so frequently in the Igorot songs, occurs eight times in this number. It is not quite so well defined here, however, as in the *Dang-dang-ay*, being modified in this song either by syncopation, by phrasing, or by lack of accent. It is interesting to note however, that it is always given on the tonic or the dominant, and also that it is repeated in true Igorot style.

The unconcern and skill with which the performer of this song unravels the mixed up duplet and triplet groups, is evidence of his inherent sense of rhythm, as it pertains to the symmetry of note groups and their embodiment as beat-units into larger, varying measure-units; but his indifference, as he juggles his metric values of $2/4$, $3/8$, and $3/4$ time, shows an entire absence of appreciation for form as revealed in even-measured sections, phrases, and periods of modern music.

Considered in the light of an oracle from the spirit himself speaking through the medium, the music would indicate that the spectre is not one of the gentle and kind disposition, but on the contrary is very domineering. He is of frightful mien, and tries to terrorize all who come under his sway.

SONG OF A SPIRIT

Record F. Sung by a medium when possessed by a spirit.

This song is very similar in general character to the *Dawak*, and many qualities in it indicate that it is given by the same performer. It has the same general formation as the *Dawak*. It is harmonic in con-

struction. Nearly all of its tones follow the triad intervals of either the minor or its relative major tonic chords or the minor dominant chord. There is no well-marked motive development but instead a succession of tones first from one triad, then from another, and so on, grouped in ever varying fashion.

The key is G minor, but closes in the relative major B. While singing in the minor, the performer follows modern methods and raises his seventh or "leading tone," when the progression is upwards into the tonic (see measures 10, 13, 25, and 27).

The tempo is mostly 108, but at the tenth measure the movement slows down to 80. At this point is shown a note with a large circle above. This tone was taken with a very wide open mouth quite in contrast with the one preceding. The next measure following shows two tones taken falsetto.

Like the *Dawak*, this song is probably the composition of the singer. Although very primitive in its general aspect, it has absorbed from some source a bit of modern influence.

If the surmise is correct that the performer of this song is the same as the one who made the record of the *Dawak*, and if the two songs were made at distinct times with a considerable period elapsing in which other records were made, it would indicate, as is frequently the case among primitive singers, that this performer almost invariably sings at the same pitch. In other words, he has to some degree the sense of absolute pitch.

BAGOYAS

Record G. A song of praise and compliment sung by a guest at a feast or party. Words are extempore, but music constant.



The singer is a tenor with considerable dramatic quality in his voice. The words of the song must be extemporized to suit each new occasion; so also, must the elemental tonal forms be extemporaneously combined, for the music must fit the words, and these will vary in rhythm and meter with each performance. The music may be considered constant, however, in that the form of each component motive is more or less fixed.

The following five group-ingredients, used either in the pure form

as shown, or with slight alterations, make up approximately one-half of the entire song.

Reiterated tones and glissandos pad out between these and make up practically the remainder of the number.

Turning our attention to the first of the above groups, which I have marked "M. M. 1." (melodic motive), we find that it is used nearly a score of times throughout the extent of the song.

A motive may be modified in ten different recognized ways and each form of modification employed in varying degrees, within certain limits, and yet the motive will not lose its identity. As an example of this we find in this song the first melodic motive *transposed* from the fourth degree of the scale (where it is originally announced) to the first, the fifth, and the sixth degrees. We find the same motive given with *omissions*, with *additions*, with *augmentations*, with *contractions*, and with *altered rhythmic values*; in short, the composer has turned this motive over and over, and unwittingly developed it much after the manner used by musicians trained in the art of composition. The fact that this motive is given four times rhythmically and melodically intact, besides recurring frequently throughout the composition in one or another of the accepted forms of modification, argues that this melodic germ was a familiar tone-figure to the singer, one that he could apply to most any syllable on which he wished to dwell. In this connection it is interesting to note that this motive, in its purest form, is always used in a transitional way, not only musically, but rhetorically, thus "marking time," as it were, while the improvisator chooses his next words of praise.

The second melodic motive (M. M. 2.) occurs at least five times, with some transformations to be sure, and sometimes even overlapping the first motive. The third (R. M.) is purely rhythmic, but seems to be a pet device of the singer and helps him out with syllables needing special emphasis. The fourth can hardly be dignified by the name of motive, in this case, but is simply a musical device (M. D.), used by the singer mostly in his terminations.

I surmise that the song in its entirety, including the above elemental groups, is the invention of the singer. He has equipped himself with these particular tonal fragments, because they not only suit his fancy, but lie well within the range of his vocal attainments. He has used them so frequently and in such varied forms that he can instantly twist, turn, or alter them to fit the requirements of the various syllables of his ever changing flatteries.

With a few such elemental groups of his own invention at command, any singer would be well equipped to extemporize for the delectation of his host and the entertainment of the other guests.

The song is exceptional for strongly accented notes. The triplets giving the value of three quarter notes in the time of two are rather unusual in modern music. It is cast in the natural minor scale of B^b. The singer never uses either the raised 6th or 7th in ascending, as do moderns in the melodic minor, but adheres strictly to the old *normal* or *natural minor* form.

Although diatonic, in that both the G^b and C[♯] appear frequently, yet the number savors much of the pentatonic.

At three places where the singer uses one or the other of the tones foreign to the pentatonic scale, he makes half-step progressions.

In the fourth line of the song we find the single instance in these records, where the performer takes an upward glissando. It is on the two-note embellishment F[♯] G^b shown in the last measure of that line. It is immediately followed by a downward glissando.

BALALOGNIMAS

Record H.

Two singers are heard on this record. They seem to be women. Possibly there are more than the two voices. As the song has such a well-defined swing and such a martial character, it must be wonderfully inspiring when given by a large company of singers.

It is cast in the natural minor diatonic scale of C[♯], though it is strongly pentatonic in character.

The rhythm is partly 5/8 and partly 4/8, but it swings along so naturally that it seems as if it could not be otherwise.

The distribution of the accents, sometimes falling on the first and third beats and again on the second and fourth, helps to give it a character which puts it in a class by itself. It has the most character of any of the women's songs in this group.

There are several verses to the song almost precisely alike in words and music.

DA-ENG. Boys and Girls Alternating.

Record I. Sung while dancing in a religious ceremony.

This song is in two distinct movements or parts varying one from the other in meter, in tempo, and in general style.

Part 1

There are at least two voices discernible in this part. They seem to be the voices of girls or women.

It is cast in the relative minor (C) of the pentatonic scale of E^b major. The tones of this scale given in order are C, E^b, F, G, B^b, and then the octave C. The tones D^a and A^b are missing, thus avoiding the half step between D and E^b, and between G and A^b (see remarks in pentatonic scale under DEFINITION OF QUALITIES, p. 480).

The A^b shown in the third from the last measure of this part is written there to define more clearly that particular glissando which seems to be of slightly different rhythmic construction than the one in the corresponding measure above. The fact that the tone is passed over glissando eliminates it from the scale.

In the fourth measure of each line we find a peculiar splitting up of the parts, one voice holding the C, while the other skips to the E^b above, thus producing the harmony-interval of a minor third. This behavior seems to be intentional on the part of the performers, as it occurs precisely the same in each of the four lines of the song, though not quite so well defined the last time owing to the fact that the upper voice does not come out so strong on the E^b. This is indicated in the notation by a small square note.

Part 1 is in the very unusual rhythm of 5/4. The rhythm is not well defined, however, as there is considerable abandon in the style of rendition. The metronome tempo of 69 applies practically throughout. Sometimes the singers are a trifle in advance of the count and at others drag behind, but always sooner or later drop into the regular beat. A stress on each fifth count gives the number a rhythm of five. It is unique also in that each line has but five measures.

Part 2

In this, the same number of voices is heard as in the first part. The performers seem to be the same ones who sang from the beginning.

The scale is the same as that of part 1. The intonation is very distinct and the character unmistakably pentatonic.

In measure 2 there is the harmony-interval of a perfect fourth followed immediately by that of a minor third, the same succession as was used in the *Da-eng*, Girls' part (Record J). In the fourth and fifth measures of this part are found unprepared minor thirds, which also appear in Record J. These harmonies are not so primitive as those found in the boys' part of the same ceremony (see Record A).

The tempo throughout this part is 80 and the rhythm strongly marked. There is a wait between the two lines. The machine was evidently stopped at this point or the needle raised and started again. Each line has the uncommon number of five measures the same as the first part, but metrically the part is in 4/4 rhythm.

The second time through, the singers seem to be striving to repeat the first line of the movement with embellishments consisting of inverted mordents, appoggiature, and trills.

Musically, there seems to be absolutely no connection between this song and the other two of the same ceremony. In many ways this song is the most interesting of those submitted. In origin it probably dates between the other two.

It is not given consecutively on the record, as there were breaks between each two lines while the needle was raised.

DA-ENG. Girls' part.

Record J. Sung while dancing in a religious ceremony.

The record shows but two voices one of which is greatly predominant in strength and confidence as if it were the leader's voice.

The song is cast in the scale of B minor. It is not pentatonic. The singers would employ, so an interrogation-mark is placed below that be either A[♮] or A[♯], according to whether the scale is the *natural* minor or the *harmonic* minor, it is not possible to determine which tone the singers would employ, so an interrogation mark is placed below that note. The raised fourth (E[♯]), shown in the fifth measure of four out of the six verses, is perfectly intentional on the part of the singers, but musically, is to be interpreted as an accidental, and does not affect the scale of the song.

In this song we again have the interval of a fourth without the sixth above. It occurs four times, each time followed immediately by the less primitive and more harmonious interval of a minor third. The minor third harmony also occurs in three other measures,—in these without preparation.

These minor thirds are all the same,—B-D, the foundation of the tonic chord of the key,—evidence that the singers have a keen sense of the minor tonality.

The tempo alternates between 96 and 108. The first half of each line is given at 96, but the second half is taken more rapidly at 108 beats per minute. Each of these rhythms is very evenly preserved, the time being well marked by accented notes and pulsations of the

voice as shown in the score. The figures at the ends of the lines indicate the number of beats rest actually taken by the performers. Twice they take the normal number four, which, if preserved throughout, would place the song in the regular eight-measure form. Some of the measures are $4/4$, and some are $3/4$.

In each verse of this song we find an example of the characteristic which I have termed a "jog." It is seen in each next-to-last measure with special sign beneath. The jogs in the 2nd, 4th, and 6th measures are the best defined (see table of special signs under INTRODUCTION, p. 444).

There are three qualities in this song, which indicate that it is of more modern origin than either of the other two which belong to the same ceremony. The frequent and undoubtedly intentional use of the raised fourth giving the half step E^\sharp to F^\sharp ; the persistent recurrence of the hardly primitive, minor-third harmony; and the fact that the song is not cast in the pentatonic scale, as are the other two records of the same ceremony, point to a more modern origin.

It may be that in the earliest practice of this ceremony the girls or women did not participate, their parts having been a later addition. This could not be determined musically, however, without examining more records of songs from this or similar ceremonies.

BOGOYAS

Record K. Sung by a woman.

This is a woman's song of praise, complimentary to the host at a party.

The singer makes use of all the scale tones of the major key of E^b , except the D^b . The B^b found in the next-to-last measure is a passing tone, and does not affect the scale or tonality. At that point the suggested supporting harmony is an augmented triad upon the tonic leading into the subdominant. With the exception of this one measure, the song is in the five-note scale. Notwithstanding that this measure contains two A^b s and also the passing tone B^b , both of which tones are foreign to this particular five-note scale, the song is not robbed of its pentatonic character.

The rhythm of this song is interesting. It alternates throughout between $4/4$ and $5/4$. It might have been notated in $9/4$ time instead, in which case it would have had but five measures.

The singer uses the downward glissandos, so characteristic of nearly all of the Tinguian songs of this group. These glissandos are

indicated by oblique lines drawn beneath the tones covered by the slide.

In the second measure there is an almost inaudible tone at the end of the glissando. It is indicated by a small, square note. Careful listening to the record at this point shows that the singer really leaves the principal tone E^b and slides with a sudden dying-down of volume. The abruptness with which the sound of the voice fades as it starts the glissando, leaves the impression of E^b still sounding.

One tone in this song is given on the inhaled breath. It is indicated by a circle with a dot in the center placed beneath the note. This tone was produced well back in the throat, while the singer sharply inhaled the breath. This artifice, occasionally used by the Tinguian, is seldom, if ever, heard in the singing of civilized peoples (for other examples, see analysis of Record M, *Dang-dang-ay*).

This song, given by a woman, has not the well-marked motive development shown in the other *Bogoyas*, sung by a man. However, we find two quite distinct, prevailing ideas set forth. The first includes the whole of the first measure and the first beat of the second. It seems to be in the nature of a question which finds its answer in the remainder of the second measure, and again in the third, and again in the fourth measure. It is the same answer, but expressed each time in a little different manner. In the fifth measure and carrying over into the sixth, the questioning is heard again. Although put forth in a different arrangement of tones, it is the same musical thought as that expressed in the first measure. This time it is answered but once. The answer takes parts of two measures. Now follows another query similar to the first, and again comes the answer fully expressed in each of the two concluding measures.

The principal interest in this centers around the B^{\sharp} , indicating that the singer has a very decided appreciation of the half step and of the upward leading tendency of a tone raised a semitone by an accidental.

NA-WAY

Record L. Sung at the celebration which closes the period of mourning for the dead.

There are two voices heard in the record, probably women. In ten of the measures there is a splitting up of the parts. In the first measure of each of the second and third lines, and also in the third measure of the third line, the difference in the parts is owing to uncertainty of attack, one of the singers, usually the leader, starting the

syllable ahead of the other performer. In the second measure of the last line, the first divergence is caused by the leader taking E by way of embellishment; and the second divergence, producing a minor third, is caused by the other voice dropping to B too soon. These are not intentional harmonies. The other six departures from unison are caused by the leader embellishing her part. The appoggiatura, shown with a tiny circle above, has the quality of falsetto. The singer yodles down to the principal tone B.

The song is strictly pentatonic. Peculiarly enough, it may be considered as belonging to any one of the following tonalities, B minor, E minor, or G major, though there is no G in the melody. The song seems the most primitive, however, when considered in the key of E minor, for the harmonies required to place it in this tonality carry more of the primitive atmosphere than do the chords which are required in either of the other tonalities.

In this connection it would be interesting to know just how these various harmonizations would appeal to the Tinguian. It is a well-known fact among musicians who have recorded the songs of primitive peoples, that though the songs are used with practically no harmonies, yet the singers feel an harmonic support which they do not express. Experiments along this line have been tried with the American Indians. Various harmonizations of a given melody have been played for them, a melody which they themselves sing only in unison, and they have been very quick to choose the particular harmonic support which appeals to them as being an audible expression of the vague something which they feel within, but do not attempt to voice.

The tones of this song when arranged to represent the scale of E minor coincide exactly with the scale tones of two of the tunings of the Japanese 13 stringed *koto*. These tunings were both borrowed by the Japanese from the Chinese by whom they were used as special tunings of the *ch'in*, or *kin*, one of the most ancient of musical instruments.

In each of the eleven glissandos shown in the notation, the voices drop suddenly to approximately the tone shown by the small square note. The glides are taken *diminuendo*, the tone dying away completely. The sudden diminuation of tone taken with a glissando gives an effect something like a short groan. The song is in seven-measure periods.

DANG-DANG-AY

Record M. Sung by women while pounding rice out of the straw and husks.

Only one voice can be distinguished in the record. It is that of a woman.

Though strongly pentatonic in character, the song is cast in the diatonic scale of F major. Metrically there is considerable freedom. $3/4$, $4/4$, and $5/4$ rhythms are thrown in with the most haphazard abandon, yet it has the even pulsing which should dominate a song of this character.

The song is in two rather distinct movements. The first, in spite of the two triplets thrown in at the first and third measures, has a straight-away motion which offers a striking contrast to the more graceful, swaying second part which is mostly in triplets. The change from one style to the other is made by the singer with no variation in tempo. It is therefore admirably adapted to accompany the regular falling of the pestles while beating out the rice.

Near the close of the song are two notes with \odot over them. These were vocalized on the inhaled breadth (for other examples of Inhaled Tones, see analysis of Record K, *Bogoyas*).

This song contains seven examples of the "Jog" (see DEFINITION OF QUALITIES, p. 479). Those in the second part of the song are the best defined. One of these is shown with open head. This jog is given the most nearly like the Igorot manner of execution of any of the examples found in these fourteen songs.

In general character, this song somewhat resembles the Boys' Part of the *Da-eng* ceremony (Record A).

KUILAY-KUILAY

Record N. Sung by women while passing liquor.

There is one singer only on this record. It is a woman. The song is given in a lively, jolly, rollicking style.

It is cast in the F major scale. The melody has good variety. At times it defines quite clearly the harmonic outline by following the tonal framework of the tonic, dominant, or subordinant chords. Passing tones are used more freely and naturally in this song than in any of the others.

In the third measure of the fifth line, the singer very plainly vocalizes a half step from F to E. The second and fourth lines also show semitones, though these are not so distinctly given on the record as the other example.

In the last measure of the third line there is a modulation into the tonality of B^b which carries through two measures.

In the fifth line are three accents which make the meter rather elusive at that point. The two small notes shown at the beginning of the third line seem to be spoken with no attempt at vocalization. They are notated, however, at the pitch of the speaking voice. The small note shown in the bottom line is given very faintly in the record and seems more like a muffled exclamation than an intentionally vocalized tone.

The tempo throughout is quite regular, following the indicated pulse of 92 in both the 6/8 and 2/4 rhythms.

In the latter part of the song there are a number of changes between duple and triple rhythm. The singer makes these changes with perfect ease and sings the groups with that exactness of proportion which characterizes the performance of most of the singers in these records.

Musically this song is strikingly adapted to the purpose for which it is intended.

TABULATION OF QUALITIES AND CHARACTERISTICS.—The qualities found in the records have been tabulated under two main headings. Under the caption, "Rarely or Never Heard in Modern Music," are listed those qualities which, so far as present research goes, are so very unusual that they may be termed musical idiosyncrasies of the race. These qualities are so eccentric that if found in several of the songs, even if the number of songs be much in the minority, the qualities may be accepted as characteristics.¹

To receive recognition as a characteristic, any quality found under the other heading, "Commonly Heard," would necessarily have to show that it quite persistently occurred throughout a large majority of the songs.

The columns of the large table, when read horizontally, show which qualities appear in a given song. Read vertically they show the degrees of dominance of the various qualities.

The songs are grouped under two heads, those given by men and boys, and those given by women and girls. This will facilitate comparison of the degrees of dominance of the qualities found in the songs of each.²

¹I use the word "modern" in this connection, as it pertains to the music of those peoples who have developed music as an art, and among whom we find conformity to the same rules and system of notation.

²By reference to the analysis of Record I, *Da-eng* (Boys and girls alternating), it will be seen that the record seems to have been made by one set of singers, apparently women and girls, who sang together on both parts. The entire record has therefore been tabulated with the women's songs.

QUALITIES

CHARACTERISTICS	
DOMINANT	ECCENTRIC
Downward Glissandos	Dry Tones
Minor Tonality	Inhaled ..
Pentatonic Character	Pulsated ..
Melodic Structure	Swelled ..
Frequent Embellishment	The Jog
Changing Duplet to Triple Time	
REFLECTIVE	
Swelled Tones	The Igorot
The Jog	The Japanese
Scales	The Amer Indians and Other Peoples
Pulsated Tones	

RARELY OR NEVER HEARD IN MODERN MUSIC

- Dry Tones
- Muted
- Inhaled
- Pulsated
- Swelled
- Downward Glissandos
- Upward
- Notes in Group
- Beats in measure
- Measures in periods
- Measures in periods
- Jog
- Japanese scales

COMMONLY HEARD

- Major Tonality
- Minor
- Pentatonic Character
- Diatonic
- Melodic Structure
- Harmonic
- Major Pentatonic
- Minor
- Natural
- Harmonic Minor
- Melodic
- Falsetta
- Semitones sung
- Allegro structure
- Inverted Moments
- Trills & Waves
- Scale
- Diatonic
- Embellishments
- Changing between Duplet to Triple Time
- Minor Thirds
- Perfect Fourth
- Harmonies
- Perfect Fifth

	Signs →	MEN and BOYS										WOMEN and GIRLS														
		1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10					
A DA-ENG (Boys' part)			2	2								X	X	X	X					5			2			
B DI WAS			X	8	6							X	X	X						X	4		6			
C SANG-SANGIT			?	8								X	X	X					?	?	X	1	2	4		
D DAWAK			X	7	1							X	X	X	X					X	X	3	1	4	15	
E SONG OF A SPIRIT					14						8	X	X	X	X					X	X	1		17		
F SONG OF A SPIRIT				X								X	X	X	X					X	2	X		2	13	
G BAGYAS (Man's)			X	7	1	1	1					X	X	X						X	3	2	1	14		
H BALALOGNIMMAS					1	?		X	X			X	X	X						X				2		
I DA-ENG (Boys and Girls Alternating)			X	X		X	1	X	X			X	X	X	X					X		1		X		
J DA-ENG (Girls part)					1			X				X	X	X	X					?	?	X	1	6	1	1
K BAGYAS (Woman's)			1	1	4		?	X				X	X	X	X					X				6		
L NA-WAY			2			2		X	X	X	X	X	X	X	?	?				X						
M DANG-DANG-AY				2			2	7			X	X	X	X						X				17		
N KUILAY-KUILAY			3			11	1				X	X	X	X	X					X				14		

Below I give the various scales used in the songs. To facilitate comparison I have shown them transposed to the same; the natural key, and written in the same clef.

(L) NA-WAY? Major Pentatonic (1) NA-WAY (2) DANG-DANG-AY (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

(B) DAWAK Minor Pentatonic (1) SANG-SANGIT (2) DI WAS (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

(C) SANG-SANGIT? Harmonic Minor Diatonic (1) SANG-SANGIT (2) SANG-SANGIT

(D) NA-WAY? Major Diatonic (1) NA-WAY (2) DANG-DANG-AY (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

(E) NA-WAY? Natural Minor Diatonic (1) NA-WAY (2) DANG-DANG-AY (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

(F) NA-WAY? Melodic Minor Ascending (1) NA-WAY (2) DANG-DANG-AY (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

(G) NA-WAY? Female or Minor (1) NA-WAY (2) DANG-DANG-AY (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

(H) NA-WAY? BOTH SCALES ORIGINAL CHINESE (1) NA-WAY (2) DANG-DANG-AY (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

(I) NA-WAY? Normal (1) NA-WAY (2) DANG-DANG-AY (3) BALALOGNIMMAS (4) DA-ENG (5) BAGYAS

JAPANESE

Numbers have been put down in some of the columns of the table. These figures indicate the number of times the quality appeared in the song. If the song has several verses on the record, and the quality appears the same number of times in each, then the tabulation gives the number of times in but a single verse. If the verses vary in the use of the quality, then an average has been struck and figure put down in the tabulation. In those songs where a certain quality occurs with such irregularity that it was impossible to represent the average without fractions, only the mark X has been put down in the table, simply to indicate that the quality was present. Such qualities as Tonality, Character, Structure, Scale, etc., naturally, with few exceptions, run through the whole song, and they are indicated by the X. Some songs have both of two opposed qualities. When this occurs, it is shown by checking both qualities.¹ Some qualities which were present, but indeterminate are indicated by an interrogation-point.²

Following the tabulation is given a detailed explanation or definition of each of the qualities listed at the heads of the vertical columns.

DYING TONES.—Found only at the end of some few glissandos. On the glide, the volume of sound diminishes so rapidly that when the final tone of the group is reached, the sound has practically died out. The effect is something like a short groan with no anguish in it. Sign, —same as a muted note, but written at the end of a glissando.

MUTED TONES.—Sort of half-articulated tones, if I may use that expression. Without more records of the same songs in which these are shown, it is not possible to determine whether they are intended by the singers as necessary parts of the records. Sign,—note with small square head.

INHALED TONES.—Tones produced well back in the throat while sharply inhaling the breath rather than exhaling it, as practiced almost universally by singers. Sign, — circle with dot in center.

PULSATED TONES.—Tones of more than one beat sung with a rhythmic stressing usually in accord with the time meter or some multiple of that meter. Pulsation is rarely heard among modern musicians, except in drilling ensemble singing. It is heard quite frequently in the singing of our American Indians and in the songs of several other primitive peoples. It occurs to some extent in nearly every one of the Tinguian men's songs. It is found in but one of those sung by women.

¹ Record F, Song of a Spirit, shows both major and minor tonality (for explanation see analysis of this song, p. 466).

² Record J, *Da-eng* (Girls' part), shows this mark in the "Scale" given below the transcription (for explanation see analysis of this song, p. 471).

Though püsation does serve to define the rhythm, I believe it is used by primitive peoples mostly as a purely æsthetic touch. It is indicated in the notation by the usual musical staccato sign thus, —

SWELLED TONES.—Tones usually of from two to four beats which are sung with increasing volume to the center, finishing with a decrescendo to the end. The Swell is sometimes applied to tones of more than four beats, but when so used, it loses some of its character. Swelled tones must be given to single syllables only, and they are the most effective when introduced several times in succession with but few, if any, intervening tones. The sign which I have used is double diverging lines followed by double converging lines placed under the note.

In 1905 it was my privilege to transcribe a number of native songs from the singing of a group of Igorot. In these songs they made frequent use of swelled tones.

DOWNWARD GLISSANDOS.—An even sliding of the voice from the topmost tone of a group to the lowest with no perceptible dwelling on any intermediate tone and without in any manner defining any of the tones lying between the extremes. Sign, — a straight line drawn obliquely downward beneath the group.

UPWARD GLISSANDOS.—An even sliding of the voice upward without sounding any of the intermediate tones. Sign, — a straight line drawn obliquely upward beneath the group.

NOTES IN GROUP, BEATS IN MEASURE, OR MEASURES IN PERIOD.—Groups of five seem to have no terrors for these people. In modern music it is extremely unusual to find notes grouped in fives, or measures having the rhythmic value of five beats, or periods made up of measures in fives. A study of the tabulation shows that the Tinguian have a rather natural bent for groupings in this number. It seems easy for them to drop into that metric form. I consider this trait, evidenced in their melodies, one of the marked characteristics of their music.¹

Groups of notes, beats, or measures in seven are so few in these records that we are not warranted in accepting it as a characteristic.

JOG.—An over-emphasized short-appoggiatura with always either the tonic or dominant of the key as the principal tone. The first tone is usually an eighth or sixteenth in value, and must stand on the next

¹ I find groups of five used occasionally in the singing of our American Indians. BURTON ("Primitive American Music") shows its frequent use among the Chippeway. Miss FLETCHER also shows groups in five in her "Omaha Music," and Miss DENSMORE gives similar grouping in her transcriptions of American Indian songs.

degree above the principal tone. The principal tone is usually a quarter note or longer in value.

In singing the jog, the short note is given a very pointed accent, the voice dropping quickly with a sort of jerk to the second, unaccented, sustained tone. It is executed without sliding, both tones being well-defined. To be most effective, it should be given two, three, or four times consecutively without intervening tones.

This device was heard very frequently in the Igorot songs; in fact, some of their songs consisted of little else than the jog sounded first on tonic two or three times, then the same number of times on the dominant, then again on the tonic, then on the dominant, and so on back and forth.

It would be interesting to know just how commonly this device is used in the singing of the Tinguian and also in the music of other tribes of these Islands. From it we might learn something of the contact of other tribes with the Igorot.

JAPANESE SCALES.—For structure of these scales, see analysis of those songs using one or another of the Japanese “tunings” or approximations to them.

TONALITY.—That entire group of harmonies which, intimately related to a foundation or “tonic” chord, may be considered as clustered around and drawn to it.

MAJOR TONALITY. That tonality in which the upper two of the three tones constituting its tonic chord, when ranged upward from its foundation tone, are found at distances of four and seven semitones respectively from it.

MINOR TONALITY. That tonality in which the upper two of the three tones constituting its tonic chord, when ranged upward from its foundation tone, are found at distances of three and seven semitones respectively from it.

PENTATONIC CHARACTER. That peculiar essence or quality which a melody has when it is built up entirely or almost wholly of the tones of the pentatonic or five-note scale. The melody may employ sparingly one or both of the two tones foreign to the pentatonic scale, and yet its pentatonic character will not be destroyed.

DIATONIC CHARACTER. That quality which a melody takes on when the two tones which are foreign to the pentatonic scale of the same key or tonality are freely employed.

I use this term in contradistinction to “Pentatonic Character,” and not in contradistinction to “Chromatic,” as it is usually employed in musical literature.

MELODIC STRUCTURE. That form of flowing succession of tones in

which the accented tones, if considered in sequence, show dominant non-adherence to chord intervals.

HARMONIC STRUCTURE. That form of tonal succession in which the tones of the melody follow rather persistently the structural outline of chords.

MAJOR PENTATONIC SCALE. That scale in which the constituent tones, if considered in upward sequence, would show the following arrangement of whole and whole-and-a-half-step intervals,— (whole) (whole) (whole-and-a-half) (whole) (whole-and-a-half).

MINOR PENTATONIC SCALE. That scale in which the constituent tones, if considered in upward sequence, would show the following arrangement of whole and whole-and-a-half step intervals,— (whole-and-a-half) (whole) (whole) (whole-and-a-half) (whole).

The pentatonic scale is markedly primitive in character. It is known to have been in use anterior to the time of Guido d'Arezzo, which would give it a date prior to the beginning of the 11th century.¹

Rowbotham ascribes the invention of scales to those primitive musicians who, striving for greater variety in their one-toned chants, added first one newly-discovered tone, then another, and another.² The pentatonic scale might have resulted from such chanting.

Most of the primitive peoples of the present day do not seem to feel or "hear mentally" the half step. If musicians of early days had this same failing, it was only natural for them to avoid that interval by eliminating from their songs one or the other of each couplet of tones which if sung would form a half step, thus their chants would be pentatonic.

Not only do people in the primitive state fail to sense the half step, but also people in modern environment who have heard very infrequently this smallest interval of modern music.

Inability to sense this interval may be better understood when we stop to consider that most of us find it unnatural and difficult to hear mentally the still smaller quarter-step interval or one of the even-yet-smaller subdivisions of the octave which some peoples have come to recognize through cultivation, and have embodied in their music.

This tendency to avoid the half step and develop along the line of pentatonic character is sometimes seen in our own children when they follow their natural bent in singing. It has been my observation that children with some musical creative ability, but unaccustomed to hearing modern music with its half steps, almost invariably hum their bits of improvised melody in the pentatonic scale.

MAJOR DIATONIC SCALE. That scale in which the constituent tones if considered in upward sequence would show the following arrangement of whole and half step intervals, —(whole) (whole) (half) (whole) (whole) (whole) (half).

¹ GROVE, Dictionary of Music and Musicians, Vol. IV.

² ROWBOTHAM, History of Music.

NATURAL MINOR DIATONIC SCALE. That scale in which the constituent tones, if considered in upward sequence, would show the following arrangement of whole and half step intervals,—(whole) (half) (whole) (whole) (half) (whole) (whole).

HARMONIC MINOR DIATONIC SCALE. That scale in which the constituent tones, if considered in upward sequence, would show the following arrangement of half, whole and whole-and-a-half step intervals, —(whole) (half) (whole) (whole) (half) (whole-and-a-half) (half).

MELODIC MINOR DIATONIC SCALE (ASCENDING). That scale in which the constituent tones, if considered in upward sequence, would show the following arrangement of whole and half step intervals, —(whole) (half) (whole) (whole) (whole) (whole) (half).

FALSETTO. Artificial or strained head-tones which sound an octave above the natural tone. Sign,—a tiny circle above the note.

In record *L.Naway* is shown one falsetto tone. It is unusual to find this effect in a woman's voice.

SEMITONES SUNG. This needs no definition. The classification is put down to show to what extent these singers appreciate the half-step intervals, and are able to vocalize it (see preceding definition of Pentatonic Scale for footnote relative to appreciation of this interval). Sign, —curved bracket above or below the notes.

In these records the men use the half-step interval in six of their seven songs, while the women make use of it in but three of their eight songs.

APPOGGIATURE. These, with the exception of one double one shown in the *Bagoyas* (Record G), are all of the single, short variety. The singers execute them with the usual quickness heard in modern music, but with the accent about equally divided between the appoggiatura and the principal tone. In the transcription they are indicated by the usual musical symbol, —a small eighth note with a slanting stroke through the hook.

MORDENTS. Those used in these songs are all of the "inverted" kind, and were executed by the singers in the manner used by modern musicians; that is, by giving a quick, single alternation of the principal tone with the next scale tone above. Indicated in the score by the usual musical symbol.

TRILLS AND WAVERS. These need no comment except to call attention to the fact that there are none found in the regular songs of

the women. The one shown in Record I (*Da-eng*, Boys and Girls alternating) is in the boys' part.

CHANGING BETWEEN DUPLÉ AND TRIPLE RHYTHM. I consider this quite a striking quality in these songs. Some primitive peoples show little concern over such rhythmic changes, in fact, among some races where percussive instruments are used to accompany the singing, we frequently hear the two rhythms at the same time fitted perfectly one against the other. This is especially true among our American Indians.

While it is not uncommon to find compositions in modern music using these two rhythms alternately, they are alternated rather sparingly. A great many musicians have difficulty in passing smoothly from one to the other, preserving perfect proportions in the note values.

In noting down in the table the findings under this head, I have put down under each song, not the number of duple or triple or quadruple groups in the song, but rather the number of "changes" which occur. After one has made the transition from one style of rhythm to the other, and has the new "swing" established, manifestly it is no special feat to follow along in that same kind of measure; but the real test is the "change" to the rhythm of the other sort. For instance, in the Song of the Spirit (Record E), I find but 31 measures and parts of measures which are in triple rhythm, yet the singer had to change his meter 47 times to execute these. On the other hand, the *Dang-dang-ay* (Record M), has in it 21 triple-time measures and triplet groups of notes, but because of the persistence of the triple rhythm, when once established in the second part, the song requires a changing of swing but 17 times.

Because of the frequency of changes found throughout these songs, and noting, as heard in the records, the precision with which, in nearly every instance, a new rhythm is taken, I conclude that the Tinguian have a remarkable grasp of different metric values, which enables them to change readily from one to the other. Naturally this trait would stamp itself upon their music, and I consider the use of such frequent metric changes a dominant characteristic.

Although frequent rhythmic change is also strongly characteristic of the music of some other peoples, as I have indicated elsewhere, it is important to tabulate it here to differen-

tiate the Tinguian from those peoples who do not make use of it.

MINOR 3RDS, PERFECT 4THS, AND PERFECT 5THS. These are the only intentional harmonies found in these songs. It is interesting to note that the only examples are in the *Da-eng* ceremony, where all three are used, some in one part and some in another.

Among some primitive peoples, only the men take part in the songs. The early chanting of all peoples was quite likely by men. Probably the most primitive harmony was a perfect fifth resulting from the attempt of men with different ranges to sing together. The difference between a bass and a tenor voice is just about a fifth. Between an alto and a soprano it is about a fourth. The difference in these voices made it impossible to sing melodies of wide range in unison, and so the basses and tenors sang in consecutive fifths. When women took up the chanting, they sang either in fifths or in fourths.

These harmonies appealed to them, and so continued in use even when there was no exigency on account of restricted range.

Referring again to the *Da-eng* ceremony, it is interesting to observe that the three different parts of this ceremony are in distinct scales, and that the part sung by the girls alone, is diatonic in character while the other two parts are pentatonic.

CONCLUSION.—I have long been of the opinion that the music of different peoples should be given more consideration by scientists in their endeavor to trace cultural relationships. In years gone by, ethnologists have attached too little importance to the bearing which music has on their science.

I am of the opinion that every peculiarity, even to the smallest element that enters into the make-up of a given melody, has some influence back of it which has determined the element and shaped it into combination. It is not unlikely that a thorough study of the music would reveal these influences, and through them establish hitherto unknown ethnological facts.

I believe that a careful study of a large number of the songs or instrumental pieces of a people will reveal a quite definite general scheme of construction which can be accepted as representative of that people alone; and if such an analysis be made of the music of many peoples and the findings so tabulated that the material will be comprehensible to ethnologists trained to that branch of musical research, many interesting and instructive side-lights will be thrown on the question of tribal relationship.

I realize that to examine exhaustively and then tabulate the characteristics found in the music of just one of the many peoples of the globe would be something of an undertaking; but nevertheless I believe the work should be undertaken in this large way, and when it is, I am sure the results will justify the experiment.

I appreciate that there is an intangible something about music, which may prove baffling when it comes to reducing it to cold scientific symbols and descriptions. Take, for instance, quality of tone. Each one of us knows perfectly the various qualities of the different speaking voices of friends and acquaintances, yet how many of us can so accurately describe those qualities to a stranger that he also may be able to identify the voices among a thousand others. The tabulation of such elusive qualities would have to be in very general terms. Such indefinable characteristics would, to some extent, have to depend for comparison upon the memory of those workers who had received first-hand impressions. It would be something like a present-day musician identifying an unfamiliar composition as belonging to the "French school," the "Italian school," or the "Russian school;" and yet, this same musician might not be able to point out with definiteness a single characteristic of that particular so-called "school."

Though I have held these opinions for several years, I am more than ever convinced, since examining these few Tinguian records, that something really tangible and worth while can be deduced from the music of various primitive peoples, and I trust this branch of ethnology will soon receive more serious recognition.

Manifestly it would be unwise to draw any unalterable conclusions from the examination of but fourteen records of a people. But even in this comparatively small number of songs, ranging as they do over such a variety of applications and uses, it is possible to see tendencies which the examination of more records may confirm as definite characteristics.

While it would be presumptuous at this time to attempt to formulate a Tinguian style, I trust that what I have tabulated may prove valuable in summing up the total evidence, which will accumulate as other surveys are made; and if perchance, the findings here set down and the conclusions tentatively drawn from them help to clear up any obscure ethnological point, the effort has been well spent.

ALBERT GALE.

CONCLUSIONS

The first impression gained by the student of Philippine ethnology is that there is a fundamental unity of the Philippine peoples, the Negrito excepted, not only in blood and speech, but in religious beliefs and practices, in lore, in customs, and industries. It is realized that contact with outside nations has in many ways obscured the older modes of thought, and has often swamped native crafts, while each group has doubtless developed many of its present customs on Philippine soil; yet it seems that enough of the old still remains to proclaim them as a people with a common ancestry. To what extent this belief is justified can be answered, in part, by the material in the preceding pages.

A study of the physical types has shown that each group considered is made up of heterogeneous elements. Pigmy blood is everywhere evident, but aside from this there is a well-marked brachycephalic and a dolichocephalic element. With the latter is a greater tendency than with the first for the face to be angular; the cheek bones are more outstanding, while there is a greater length and breadth of the nose. Individuals of each type are found in all the groups considered, but taken in the average, it is found that the Ilocano and Valley Tinguian fall into the first or round-headed class, the Bontoc Igorot are mesaticephalic, while between them are the mountain Tinguian and Apayao.

Judging from their habitat and the physical data, it appears that the Igorot groups were the first comers; that the brachycephalic Ilocano-Tinguian arrived later and took possession of the coast, and that the two groups have intermarried to form the intermediate peoples. However, a comparison of our Luzon measurements with the people of southern China and the Perak Malay leads us to believe that the tribes of northwestern Luzon are all closely related to the dominant peoples of southern China, Indo-China, and Malaysia in general, in all of which the intermingling of these types is apparent.

The dialects of northwestern Luzon, while not mutually intelligible, are similar in morphology, and have a considerable part of their vocabularies in common. Here again the Igorot is at one extreme, the Ilocano and Valley Tinguian at the other, while the

intervening groups are intermediate, but with a strong leaning toward the coast tongue.

Considering, for the moment, the Bontoc Igorot and the Tinguian, it is found that both have certain elements of culture which are doubtless old possessions, as, for instance, head-hunting, terraced rice-fields, iron-working, a peculiar type of shield, and a battle-axe which they share with the Apayao of Luzon and the Naga of Assam.

A part or all of these may be due to a common heritage, at any rate, they help to strengthen the feeling that in remote times these peoples were closely related. But a detailed study of their social organizations; of their ceremonies, songs, and dances; of their customs at birth, marriage, death, and burial; of their house-building; as well as the details of certain occupations, such as the rice culture, pottery making, and weaving, indicates that not only have they been long separated, but that they have been subjected to very different outside influences, probably prior to their entry into the Philippines.

It is not in the province of this monograph to deal with the probable affiliations of the Igorot, neither is it our intention to attempt to locate the ancient home of the Tinguian, nor to connect them with any existing groups. However, our information seems to justify us in certain general conclusions. It shows that the oft repeated assertions of Chinese ancestry are without foundation. It shows that, while trade with China had introduced hundreds of pieces of pottery and some other objects into this region, yet Chinese influence had not been of an intimate enough nature to influence the language or customs, or to introduce any industry. On the other hand, we find abundant evidence that in nearly every phase of life the Tinguian were at one time strongly influenced by the peoples to the south, and even to-day show much in common with Java, Sumatra, the Malay Peninsula, and through them with India. As a case in point we find in the procedure at birth that the Tinguian are in accord with the Peninsular Malay in at least eight particulars, some of which, such as the burning of a fire beside the mother and newborn babe for a month or more, the frequent bathing of both in water containing leaves and herbs, the "fumigating" of the baby, the throwing of ashes to blind evil spirits, are sufficiently distinctive to indicate a common source, particularly when they still occur together in connection with one of the great events of life.

Frequent reference has been made to the parallels between Tinguian customs and those practiced in Sumatra, while the methods of rice-culture are so similar that they can have come only from the same source. In the weaving the influence of India seems evident, despite the fact that cotton is not bowed in Abra, and the Tinguian method of spinning seems unique. These methods, apparently distinctive, may once have been practised more broadly, but were superseded by more efficient instruments. The primitive method of ginning cotton by rolling it beneath a tapering rod appears to be found nowhere in the Philippines outside of Abra, but it is used in some remote sections of Burma.

Part I of this volume presented a body of tales which showed many resemblances to the Islands of the south, as well as incidents of Indian lore. There is, in fact, a distinct feeling of Indian influence in the tales of the mythical period; yet they lack the epics of that people, and the typical trickster tales are but poorly represented.

The vocabulary shows comparatively little of Indian influence; yet, at the time of the conquest, the Ilocano was one of the coast groups making use of a native script which was doubtless of Hindu origin.

The many instances of Indian influence do not justify the supposition that the Tinguian were ever directly in contact with that people. The Malay islands to the south were pretty thoroughly under Hindu domination by the second century of the Christian era, and it is probable that they were influenced through trade at a considerably earlier date. Judging from our data, it would seem that the Ilocano-Tinguian group had left its southern home at a time after this influence was beginning to make itself felt, but before it was of a sufficiently intimate nature to stamp itself indelibly on the lore, the ceremonial and economic life of this people, as it did in Java and some parts of Sumatra. It is possible that these points of similarity may be due to trade, but if so, the contact was at a period antedating the fourteenth century, for in historic times the sea trade of the southern islands has been in the hands of the Mohammedanized Malay. Their influence is very marked in the southern Philippines, but is not evident in north-western Luzon.

Concerning the time of their arrival in Luzon, and the course pursued by them, we have no definite proof; but it is evident that the Tinguian did not begin to press inland until comparatively recent times. Historical references and local traditions indicate that most of this

movement has taken place since the arrival of the Spaniards, while the distribution of the great ceremonies gives a further suggestion that the dominant element in the Tinguian population has been settled in Abra for no great period. The probable explanation for this distribution is that the interior valleys were sparsely settled with a population more akin to the Igorot than to the Tinguian, prior to the inland movement of the latter people; that the Tinguian were already possessed of the highly developed ceremonial life, before they entered Abra, and that this has been spread slowly, through intermarriage and migration, to the people on the outskirts of their territory.

These ceremonies are still practised by some families now residing in Christianized settlements in Abra and Ilocos Sur, while discreet questioning soon brings out the fact that they were formerly present in towns which have long been recognized as Ilocano. The relationship of the Tinguian and Ilocano has already been shown by the physical data and historical references; but were these lacking, it requires but a little inquiry and the compilation of genealogical tables to show that many Ilocano families are related to the Tinguian. It is a matter of common observation that the chief barrier between the two groups is religion, and, once let the pagan accept Christianity, he and his family are quickly absorbed by the Ilocano.

Uninterrupted trade with the coast in recent years, Spanish and American influence, have doubtless affected considerable changes in the Tinguian. If, however, we subtract recent introductions, it is probable that we have in the life of this tribe an approximate picture of conditions among the more advanced of the northern Philippine groups prior to the entry of the European into their islands.



INDEX

- Abang, village with defensive wall, 20.
 Abra, American rule in, 246; description of, 239.
 Abstracts, of tales, 202.
 Aeta, see Negrito.
 Afterbirth, child, Sayen, 28; disposal of, 264.
 AGENEM, powerful female spirit, 297.
 Akop, an evil spirit without body, 300.
 Alan, deformed spirits, 14.
 Alangtin, charm against spirits of the dead, 181.
 Alawig, dance held during Sayang ceremony, 14.
 Alzado, name applied to wild head-hunting group, 10 note 1.
 Anito, general term for spirits, 301.
 Apayao, measurements of, 254; relationship to Tinguian, 236.
 Apdel, spirit resident in the guardian stones, 298.
 Augdstinian Friars, work of, among Tinguian, 243.
 Bakid, ceremony for a new house, 322.
 Balau, great bird, 92.
 Balaua, greatest of spirit houses, 9, 308.
 Banal, a vine, used as charm against spirits of the dead, 182.
 Banana, 406.
 Bangued, capital of Abra, 243.
 Banog, great bird, carrying man away, 183.
 Bark Cloth, 422.
 Basket-making, 423.
 Baskets, types of, 425.
 Bawī, origin of, 178; small spirit house, 309.
 Baygan (Vigan), capital of Ilocos Sur, 20.
 Beads, how acquired, 191; mentioned in tales, 31; ornaments, 21.
 Beauty, illuminating power of, 35.
 Betel-nuts, description of, 407; important in ceremonies, 24, 31; magic properties of, 19; use of, 410; used in summoning of guests, 13.
 Binikwan, a special ceremony, 358.
 Birth, magic in, 38; observances at, 261.
 Blow-guns, 381.
 Boat Burial, 24 note 1.
 Bruhl-Lévy, theory of, discussed, 292.
 Camote, sweet potato, 404.
 Carabao, described, 412; mentioned in tales, 51.
 Cave, home of spirit, 191.
 Celestial Beings, 15, 25.
 Celestial Bodies, importance of, in myths, 15.
 Ceremonies, general discussion of, 315; great ceremonies, 327.
 Ceremonial Paraphernalia, 311.
 Ceremonial Structures, 308.
 Characters, in myths, 6.
 Chickens, 412.
 Childhood, 272.
 Chinese, ancestry of Tinguian, disputed, 247; trade with, 241.
 Climate, 240.
 Clothing, 9, 437.
 Coconut, 406.
 Comparison, of life represented in tales with present conditions, 20.
 Conclusions, to tales, 30; to whole study, 486.
 Corn, 404.
 Crocodiles, guard girls, 87; guard village, 93; people ride on, 84.
 Cultivated Plants and Trees, 403.
 Customs, described in myths, 13; power of, 26, 31.
 Cycle of Life, 261.
 Da-eng, described, 439; music of, 445, 451; sacred dance, 13; words of song, 456.
 Dagupan (Dagupan), town in Pangasinan, 8.
 Daily Life, in tales, 9.
 Dances, 439.
 Dawak, a ceremony, 13, 315.
 Dayapan, important woman, 177.
 Dead, restored to life, 90.
 Death, cause of, 177; customs connected with, 14; disposal of corpse, 23-24; temporary state, 19.
 Death and Burial, 283.
 Decorative Art, 431.
 Defensive Walls, around villages, 20.
 Diam, description of, 5; part of ceremony, 27; semi-magical formula, 296.
 Discrepancies, between life in tales and of to-day, 32.
 Divorce, 283; in tales, 12.
 Dogs, 411.

- Domestic Animals, 411.
 Dumagat, assistant of writer, 3.
 Dyes, 426.
- Earth, ideas concerning, 189.
 Economic Life, 387.
 Engagement, 278.
 Etiquette, 14, 363.
- Fables, 195; parallels of, with other regions, 28.
 Family, 366; rules governing, 361.
 Fire, beside new-born child, 265.
 Firefly, in myths, 18 note 3, 85.
 Fishing, 383.
 Fish-stick, magic of, 33.
 Flood, 189.
 Funeral, 284.
- Gale, Albert, chapter on music, 443.
 Galong-galong, baby jumper, 110.
 Games, 276.
 Gansa, copper gong, 440.
 Geographical Relations and History, 238.
 Gipas, ceremony before birth, 263.
 Gironière, Paul de, his account of Tinguian burial discussed, 287.
 Gold, importance of, in tales, 15, 21.
 Granaries, for rice, 394.
 Graves, types of, 287.
- Harrow, 390.
 Head-axe, 375.
 Head-hunting, celebration following, 22; following death, 286; in tales, 10, 21; see also warfare.
 Hermaphrodites, 361.
 Hides, preparation of, 429.
 Hoe Culture, 20.
 Horses, how acquired, 189.
 House Furnishings, 365.
 Hunting, 378.
- Ibal, ceremony for sick child, 268.
 Ibwa, an evil spirit, 299.
 Idadaya, spirit of the East, 298.
 Igorot, institutions of, 236, 247; measurements of, 255.
 Ilocano, identical with Tinguian, 236; measurements of, 250; receive help from Tinguian, 244.
 Inanimate Objects, appear alive, 16.
 India, influence of, on Tinguian culture, 236.
 Inheritance, 362.
 Ipogau, spirit name for Tinguian, 8, 171.
 Iron-working, 413.
 Itneg, local name for Tinguian, 182 note 2, 243.
- Jars, appear as animals, 51; Chinese, 21, 31; talking, 16, 31; wealth reckoned in, 21.
- Kaboniyán, a powerful spirit, 298.
 Kadaklan, greatest of the spirits, 297.
 Kadalayapan, important town of mythical period, 7, 20.
 Kakok, a bird, origin of, 191.
 Kalangan, important spirit structure, 310; the ceremony, 344.
 Kalau, origin of bird, 190.
 Kalinga, relationship to Tinguian, 236.
 Kambaya, striped blanket, 183.
 Kaodanan, important town in the myths, 7, 20.
 Komau; giant spirit, 186.
- Lakay, headman, 359.
 Lawed, chewed with betel-nut, 406, 410; omen vine, 96.
 Laws, 361.
 Layog, ceremony held one year after a death, 290.
 Langpadan, mountain rice, 20, 138, 387 note.
 Life and Death; beliefs concerning, 292.
 Limahon, claims of descent from, refuted, 259.
 Love Charm, 77 note 2.
- Magic, 14, 17, 24, 304.
 Magic Flight, 17 note 1.
 Magic Pool, restores dead to life, 19.
 Magsawi, talking jar, 192.
 Malay, movement into Luzon, 235.
 Marriage, in mythical period, 11, 12; of relatives, 12, 23; price, 11; prohibitions, 361.
 Medicines, 409.
 Mediums, 6 note 1, 301.
 Migrations, into Abra, 32; into mountains, 241.
 Monkey, origin of, 189-190.
 Moon, spots on, 192.
 Mountain Tinguian, measurements of, 253.
 Murder, punishment of, 362.
 Music, 443.
 Musical Instruments, 440.
 Mythical Period, tales of, 6.
- Naming, 266.
 Negrito, aborigines of Luzon, 235; appear in tales, 147.
 Net-making, 427.
 Ngorongor, a minor ceremony, 326.
- Olog, ceremony to promote growth of child, 276.

- Omens, 19 note 1, 306.
- Pakálon, 11.
- Pala-an, ceremony, 328; spirit structure, 310.
- Pan-pipe, 57, 441.
- Peñarubia, governor of Abra, 245.
- Perak Malay, measurements of, 258.
- Personal Adornment, 437.
- Physical Type, 247.
- Pigs, 412, become boys, 116.
- Pinaing, guardian stones, 178, 319.
- Pinasal, a ceremony, 355.
- Pipes, manufacture of, 428.
- Plow, 390.
- Poison, 148.
- Polynesians, relationship of, to primitive Malay, 235.
- Pota, concubine, 283, 360.
- Pregnancy, 262.
- Principal Characters, in tales, 6-7.
- Property, transfer of, 362.
- Raft, ceremonial, 24 note 1, p. 130.
- Rainfall, 240.
- Reconstruction, of culture represented in tales, 6.
- Religion and Magic, 295.
- Rice Culture, compared with Igorot, 394; compared with Sumatra, 394; described, 387.
- Rice Cutters, 393.
- Rice Harvest, 402.
- Rice Mortar, 394.
- Ritualistic Myths, 26, 171.
- Rooster's Eggs, 34.
- Rope, manufacture of, 420.
- Sagang, head pole, 10, 310.
- Sagobay, a ceremony, 324.
- Salaksak, the kingfisher, an omen bird, 307.
- Salcedo, subdues Ilocos provinces, 241.
- Saloko, ceremonial pole, 310; the ceremony, 319.
- San Fernando, town in Pangasinan, 8.
- Sangásang, a ceremony, 323.
- Sapata, the oath, 326.
- Sayang, greatest of the ceremonies, 345; relationship to warfare, 13.
- Sayen, afterbirth child, 28, 185.
- Shields, 378.
- Sleds, 390.
- Snakes, form defensive walls, 46, 93; Kanag becoming a snake, 135.
- Songs, of children, 275.
- Southern Chinese, measurements of, 257.
- Spears, 377.
- Spinning and Weaving, 416.
- Spirits, 297; of the dead, 291.
- Spirit Town, 184.
- Still-born Child, 264.
- Sudipan, spirit name for earth, 8.
- Sugar-cane, 405; in tales, 107.
- Sun, in myths, 15, 33, 37.
- Taboos, following death, 290.
- Tadek, a dance, 11 note 3, 440.
- Tales, of mythical period, 33; reconstructed culture of, 6.
- Taltalabong, 311.
- Tanggap, a spirit structure, 311; the ceremony, 331.
- Terraced Fields, 389.
- Theft, 362.
- Tinguian, not an Igorot sub-group, 20; physical type, 260; valley, measurements of, 251.
- Tobacco, 405, 410.
- Tops, mentioned in tales, 93, 274.
- Totems, none found, 360.
- Toys, 274.
- Transformation, into animals, 18.
- Village, description of, 363.
- Warfare, 10, 371; see head-hunting.
- Watch Houses, in fields, 154.
- Weapons, 375.
- Wedding Ceremony, 280.
- Wild Plants and Trees, 408.





THE PROVINCE OF ABRA. LOOKING INLAND FROM THE COAST RANGE (PL. 2ND).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



ABRA LOOKING TOWARD THE SEA FROM THE TOP OF THE CORDILLERA CENTRAL (p. 230).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



MANABO MAN (D. 251).

THE LIBRARY
OF THE
UNIVERSITY OF MICHIGAN



MAN OF BA-AK (P. 551).

THE LIBRARY
OF THE
UNIVERSITY OF CHICAGO



THE LIBRARY
OF THE
CONGRESS



WOMAN OF PATOK (p. 251).

THE LIBRARY
OF THE
HARVARD MEDICAL SCHOOL



A MOUNTAIN TINGUAN FROM LIKUAN (P. 353).

THE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA



A YOUNG MAN FROM LIKUAN (p. 55).

THE LIBRARY
OF THE
CONGRESS



GIRL FROM THE MOUNTAIN VILLAGE LAMARO.
Photograph from Philippine Bureau of Science. See p. 253.

THE LIBRARY
OF THE
UNIVERSITY OF CHICAGO



A WOMAN FROM LAMARO.

Photograph from Philippine Bureau of Science. See p. 253.

THE LIBRARY
OF THE
HONORABLE SENATE OF ILLINOIS



A TYPICAL SMALL BOY.

Photograph from Philippine Bureau of Science. See p. 275

THE LIBRARY
OF THE
MUSEUM OF NATURAL HISTORY



THE BABY TENDER (p. 270).



A BETHROTHED MAIDEN (p. 270).

THE LIBRARY
OF THE

UNIVERSITY OF TORONTO



THE WEDDING (p. 280).

THE LIBRARY
OF THE
UNIVERSITY OF TORONTO



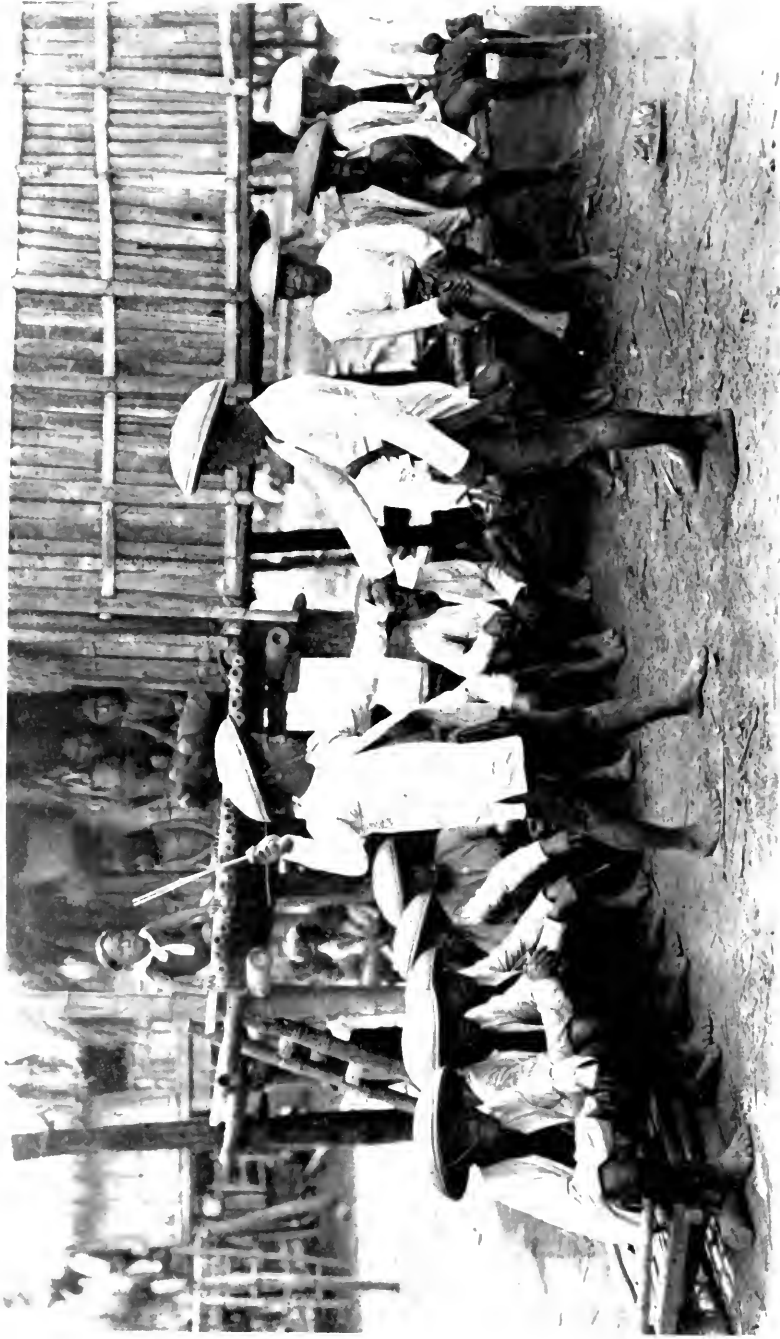
MOTHERS AND BABIES (Pl. 373).

THE LIBRARY
OF THE
BIRMINGHAM COLLEGE



FUNERAL OF MALAKAY (D. JNSI).

THE LIBRARY
OF THE
AMERICAN BUREAU OF GEOGRAPHIC NAMES



THE WHIPPING AT A FUNERAL (PL. XVI.)

THE LIBRARY
OF THE
UNIVERSITY OF MICHIGAN



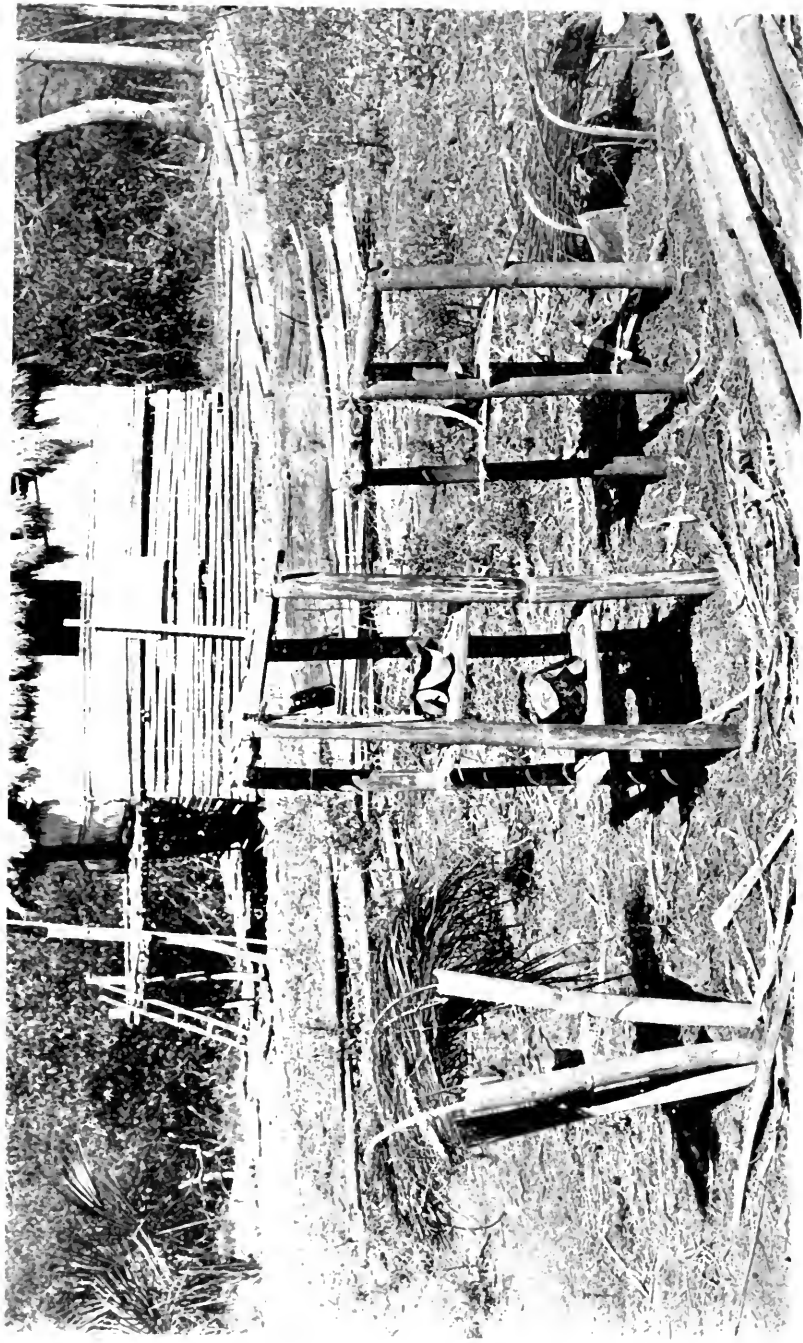
INAPAPAIG. AN OFFERING TO THE SPIRITS (pp. 291, 302).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



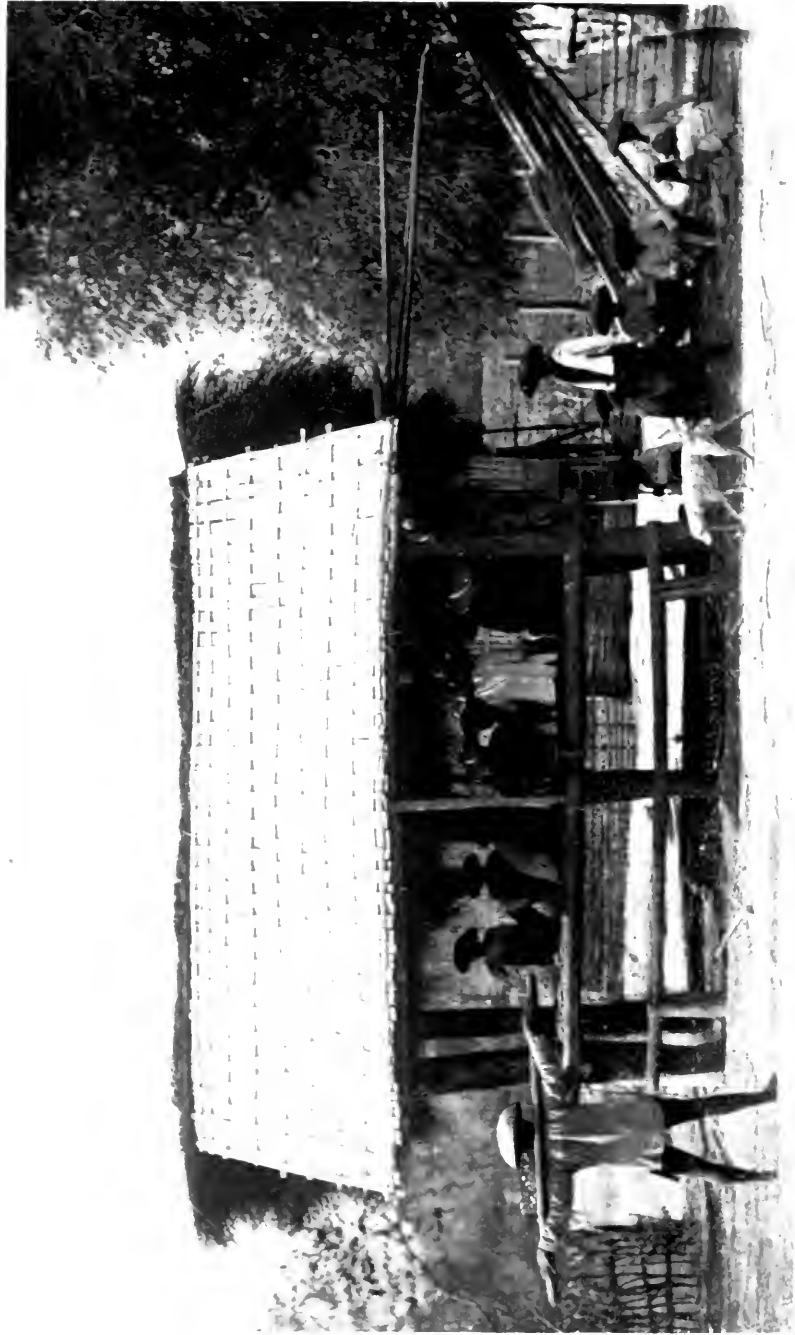
THE MEDIUM'S OUTFIT (pp. 302, 313).

THE LIBRARY
OF THE
MEMORIALS OF CONGRESS



CEREMONIAL HOUSES, LEFT TO RIGHT ARE: FIRST, PANGKEW; SECOND AND THIRD, TANGPAK; FOURTH ALALOT (IPP. 308, 310, 311).





BALAUA. THE GREATEST OF THE SPIRIT STRUCTURES (pp. 309, 310)

THE LIBRARY
OF THE
UNIVERSITY OF CHICAGO



SPIRIT HOUSES IN A GARDEN (pp. 309, 310).

THE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA



THE KALANGAN: A SPIRIT HOUSE; SECOND IN IMPORTANCE (pp. 310, 344).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



PALA-AN, THE SPIRIT STRUCTURE BUILT IN THE FIRST OF THE GREAT CEREMONIES (p. 310).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



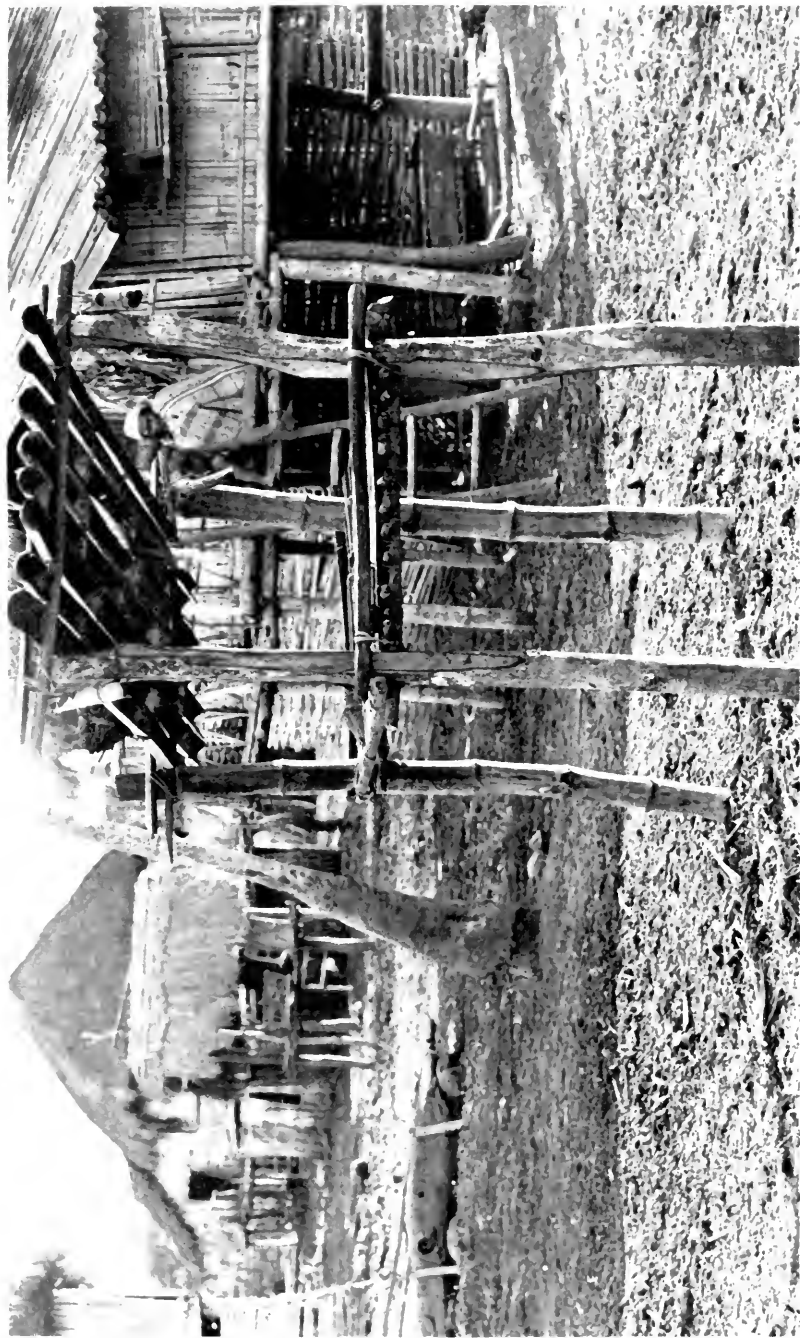
THE SALOKO, A SPLIT BAMBOO, IN WHICH OFFERINGS ARE PLACED (pp. 310, 319)

THE LIBRARY
OF THE
ECONOMIC SCIENCES



READY TO LAUNCH THE SPIRIT RAFT ON THE RIVER (pp. 311, 341).

THE LIBRARY
OF THE
MEMORIAL UNIVERSITY OF
EDMUNTON



THE TANGPAP, AN IMPORTANT SPIRIT STRUCTURE (PP. 311, 317).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



GATEWAY AT LIKUAN (pp. 211, 254).

THE LIBRARY
OF THE
CONGRESS



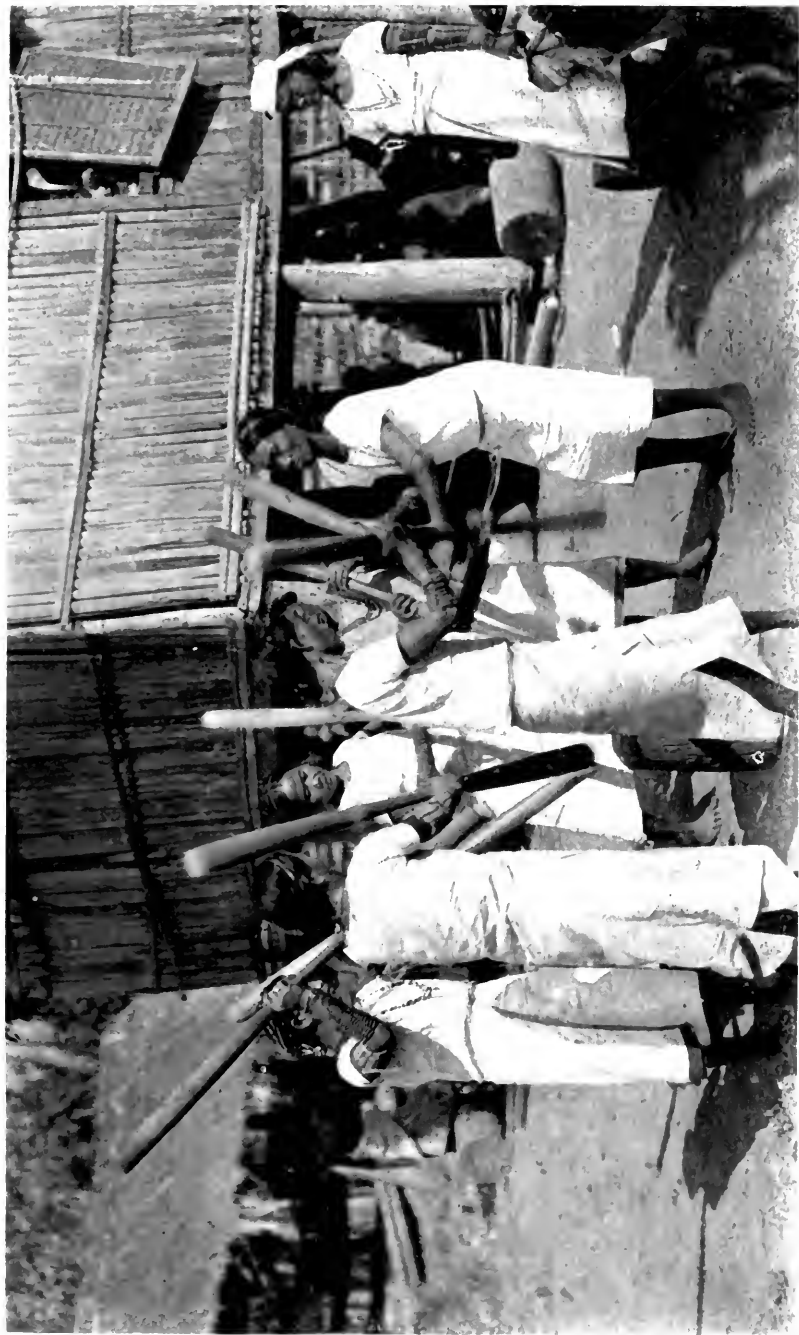
POTTERY HOUSES, FOR THE SPIRIT OF THE RICE (p. 313).

THE LIBRARY
OF THE
UNIVERSITY OF CHICAGO



A MEDIUM MAKING AN OFFERING TO THE GUARDIAN STONES (P. 309)

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



CEREMONIAL POUNDING OF THE RICE (Pl. 309).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



RENEWING THE OFFERING ON THE SPIRIT SHIELD (p. 341).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



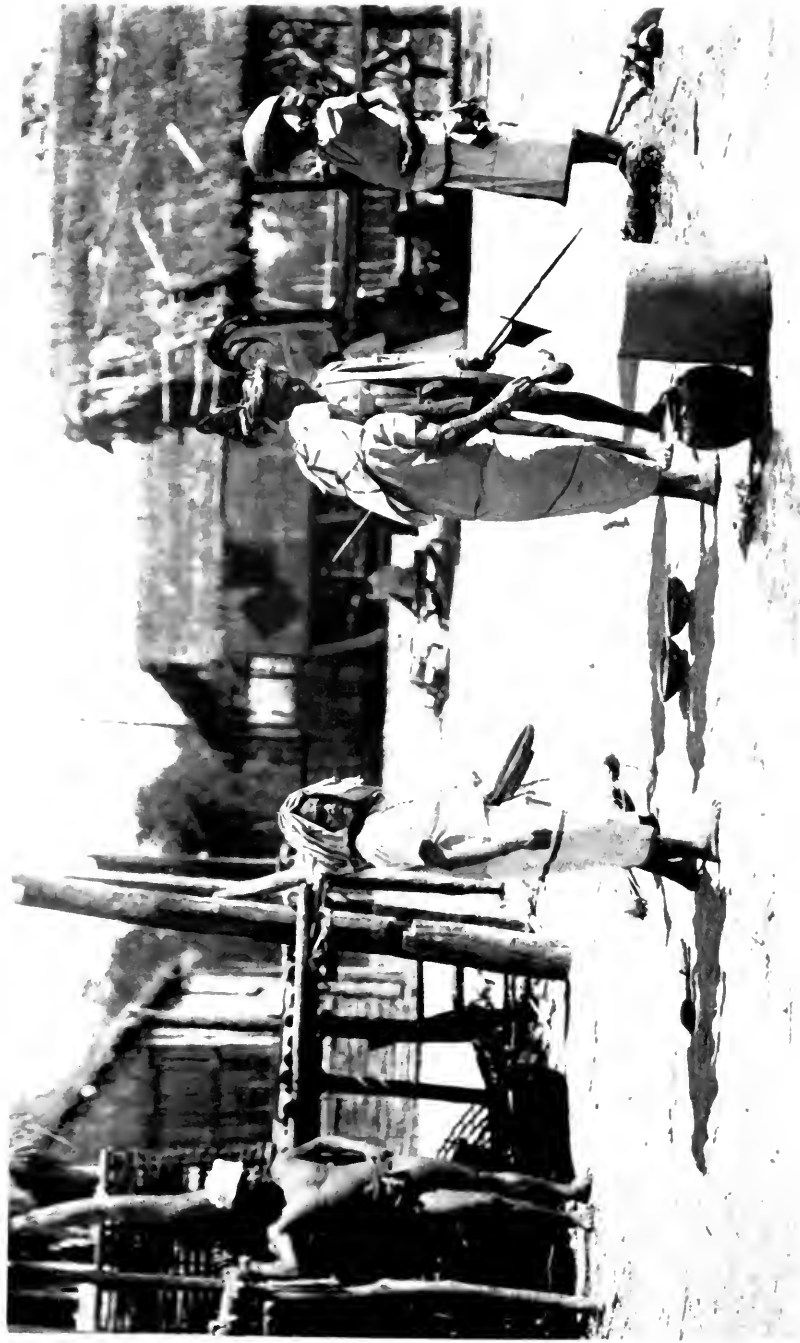
SINGING A PIG AT A CEREMONY (p. 317).

The HISTORY
OF THE



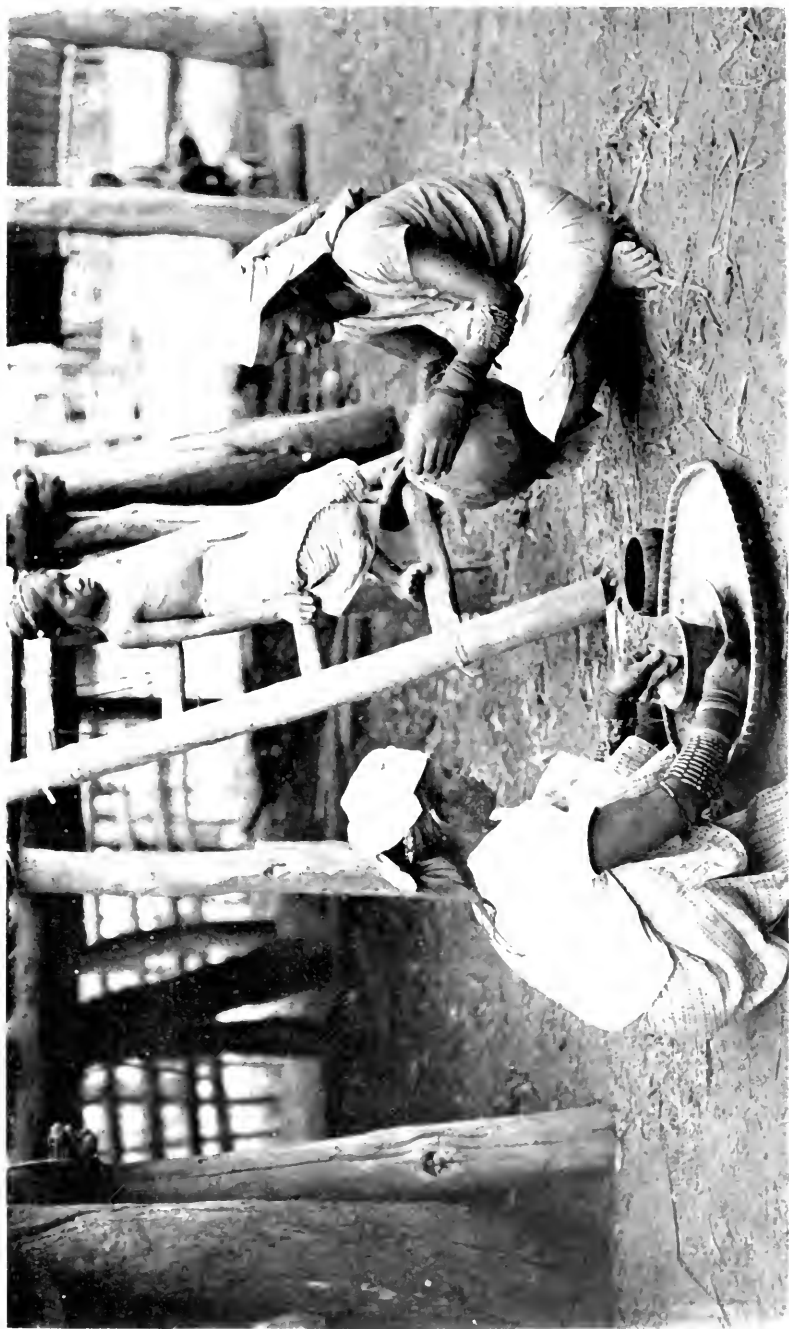
OFFERING OF THE PIGS TO THE SPIRITS (P. 35).

THE LIBRARY
OF THE
MUSEUM OF NATURAL HISTORY



THE SAYANG CEREMONY. THE TWO WOMEN IN THE FOREGROUND ARE MEDIUMS (p. 351).

THE LIBRARY
OF THE
MEMORIAL UNIVERSITY



POTTERS AT WORK. THE ONE ON THE RIGHT IS A MAN IN WOMAN'S GARB (Pl. 300, 1-2).

THE LIBRARY
OF THE
BETHLEHEM COLLEGE



A FAMILY OF LABANAN (1931).

THE LIBRARY
OF THE
UNIVERSITY OF TORONTO



THE VILLAGE OF SALLOPADIN (p. 363).

THE LIBRARY
OF THE
AMERICAN MUSEUM OF NATURAL HISTORY



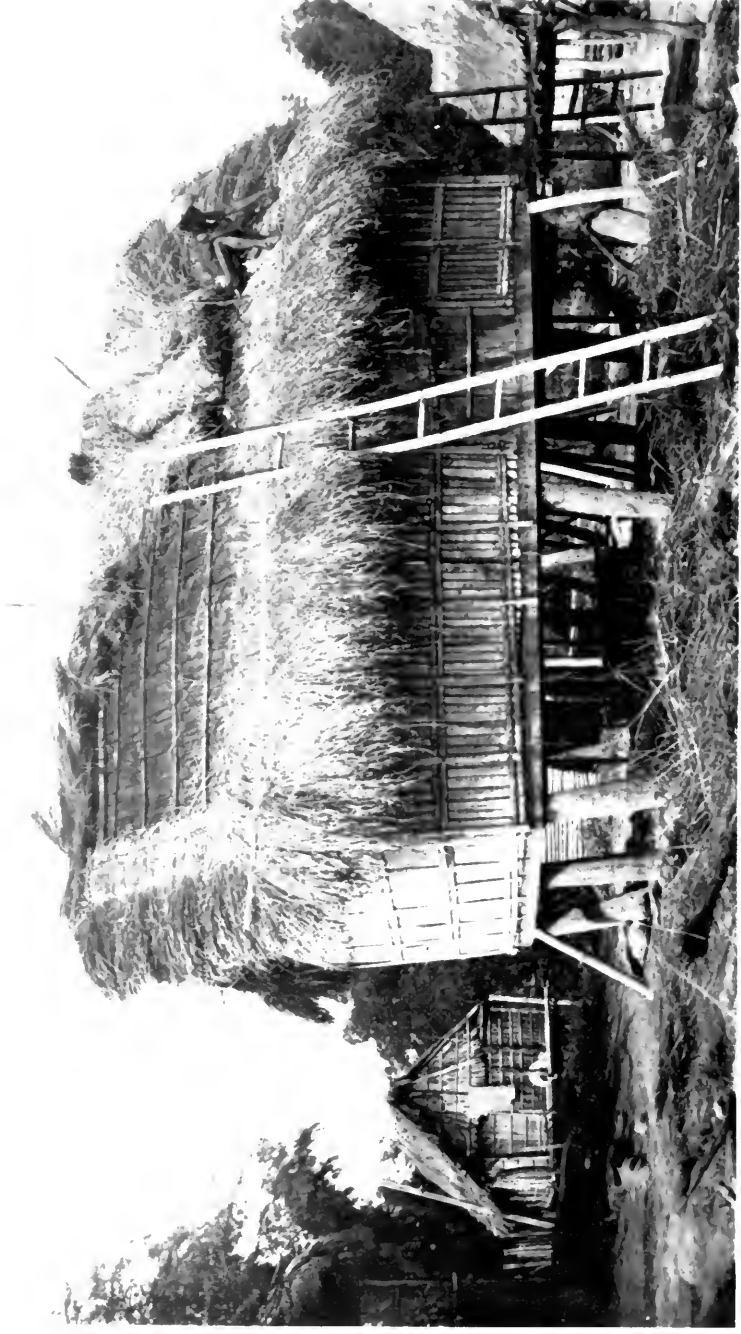
TYPICAL HOUSES (p. 303).

THE LIBRARY
OF THE
MEMORIAL UNIVERSITY OF
EDMUNDBURGH



HOUSE BUILDING (p. 309).

THE LIBRARY
OF THE
MEMORIAL COLLEGE



ROOFING A HOUSE (p. 264).

THE LIBRARY
OF THE
MEMORIAL UNIVERSITY



WATER CARRIERS.

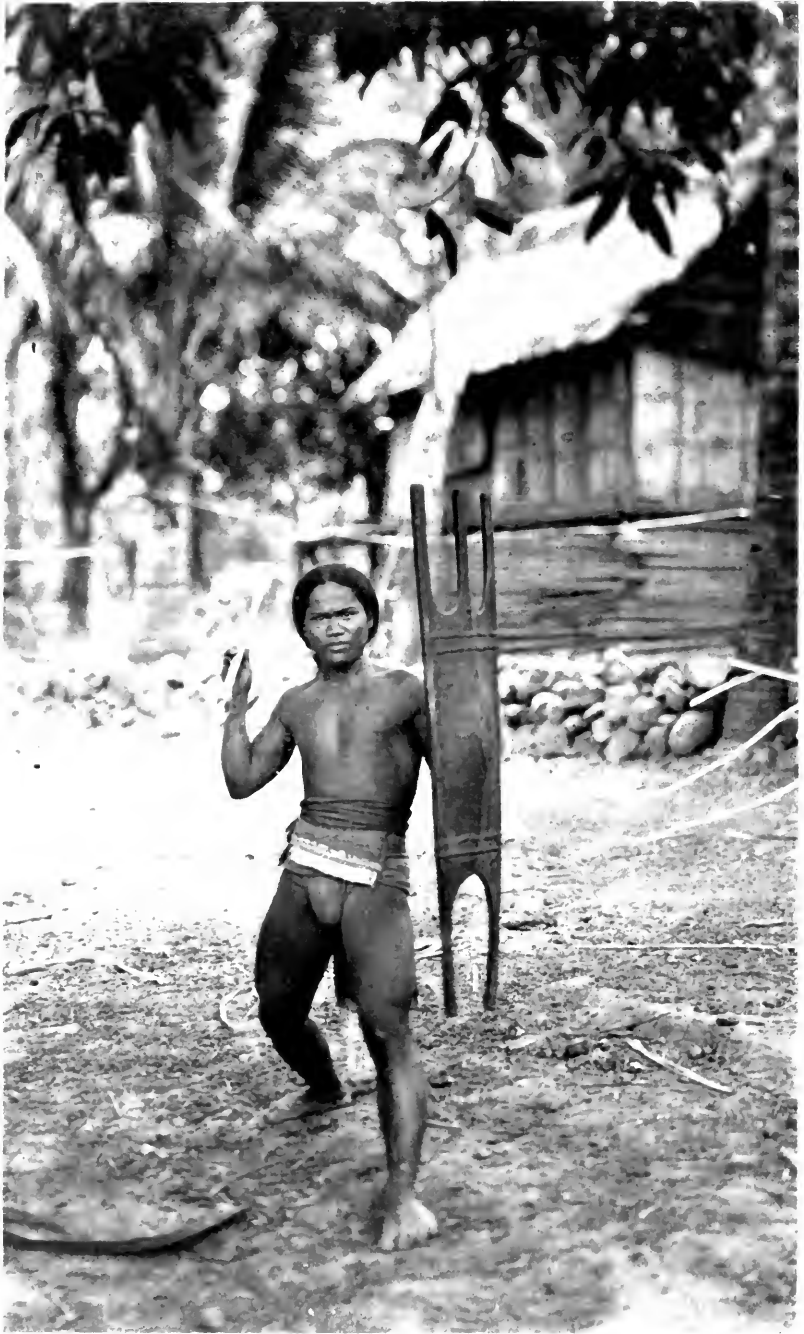
Photograph from Philippine Bureau of Science. See p. 309.

THE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA



A TINGUIAN HOUSE WIFE.
Photograph from Philippine Bureau of Science. See p. 370.

THE LIBRARY
OF THE
UNIVERSITY OF MICHIGAN



A WARRIOR (p. 373).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



HUNTER FITTED FOR THE TRAIL (p. 378).

THE LIBRARY
OF THE
COMMISSIONER OF LANDS



THE LIBRARY
OF THE
MEMBER



SHOOTING THE BLOWGUN (p. 38).

THE LIBRARY
OF THE

UNIVERSITY OF TORONTO



HIGHLAND FIELD AND TERRACES AT PATOK (Pl. 387).

THE LIBRARY
OF THE
UNIVERSITY OF TORONTO



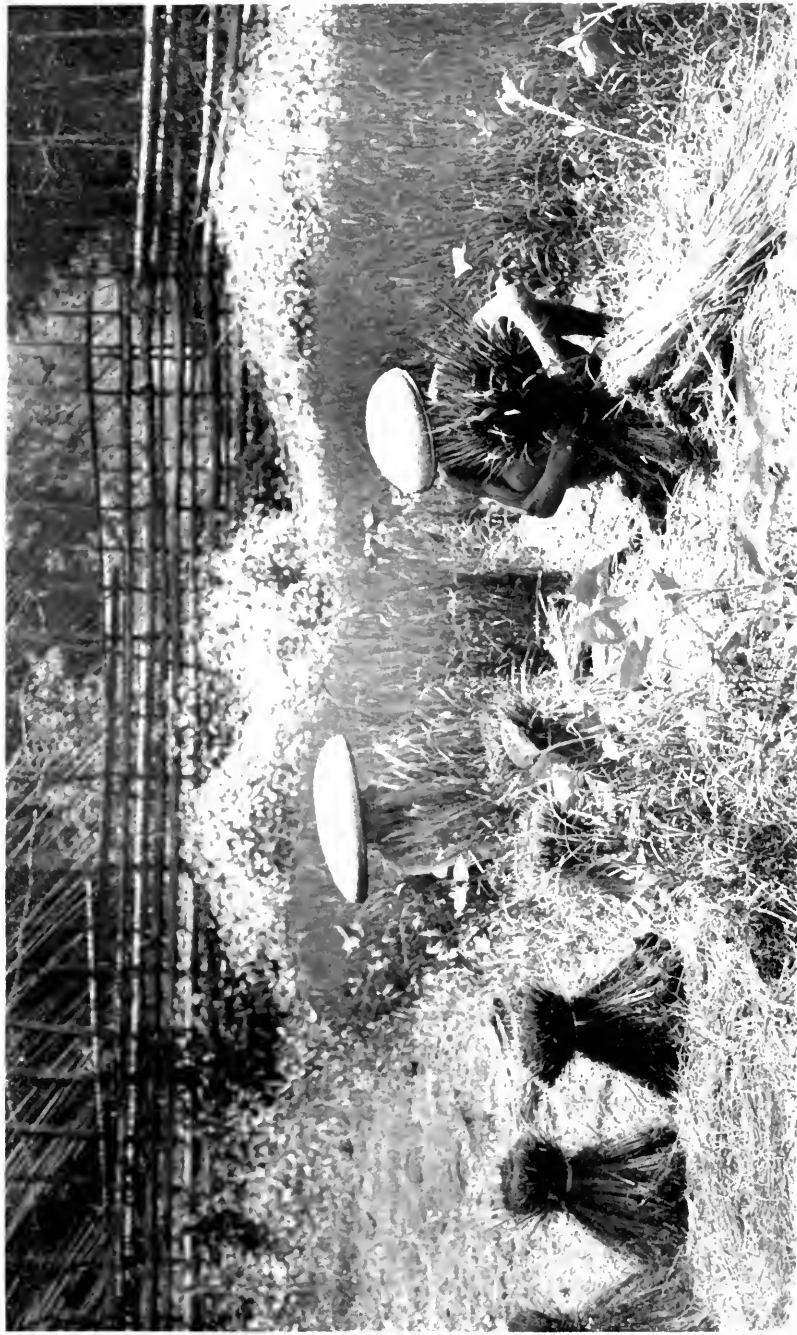
THE RICE TERRACES NEAR LIKUAN (P. 254).

THE LIBRARY
OF THE
MUSEUM OF NATURAL HISTORY
1880



PLOWING IN THE LOWER TERRACES (19, 2001).

THE LIBRARY
OF THE
UNIVERSITY OF TORONTO



TAKING RICE SPROUTS FROM THE SEED BEDS (PL. 302).

THE LIBRARY
OF THE
UNIVERSITY OF CHICAGO

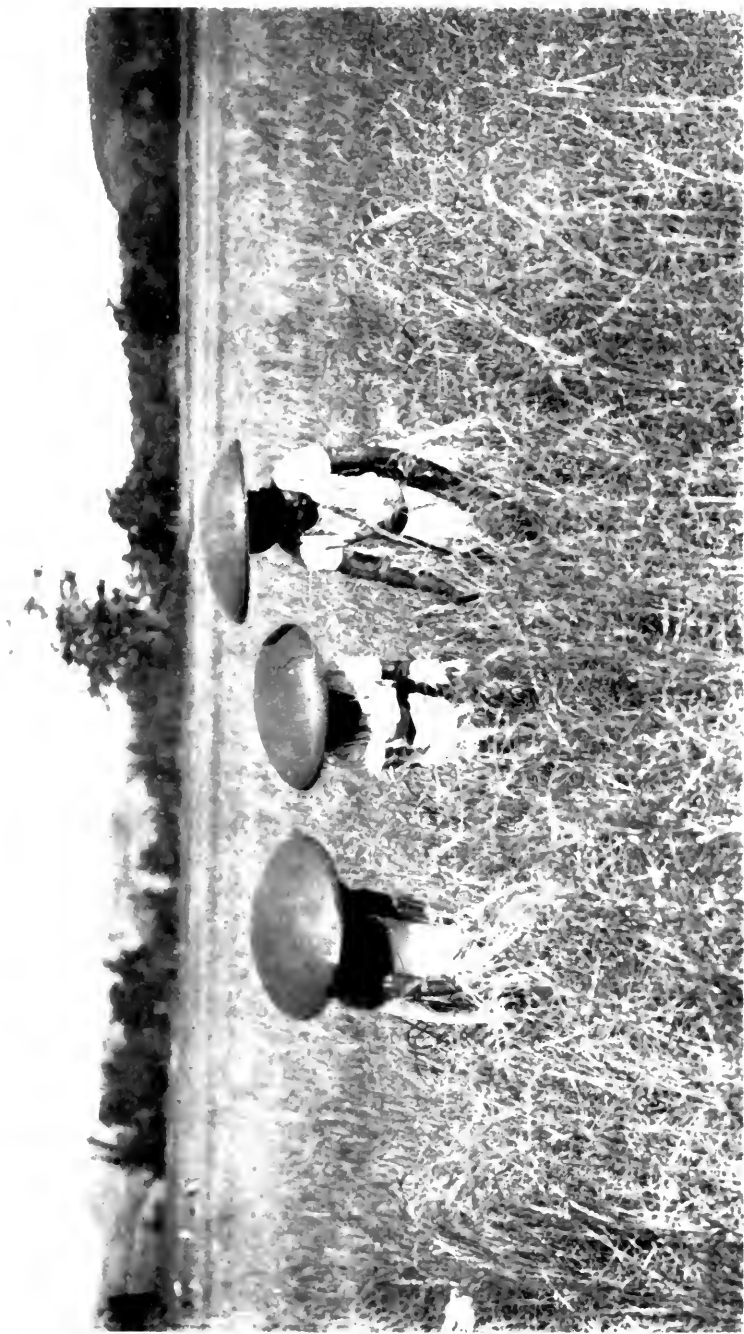


TRANSPLANTING THE RICE (p. 302).

THE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA



BIRD SCARERS IN THE FIELDS (1901).



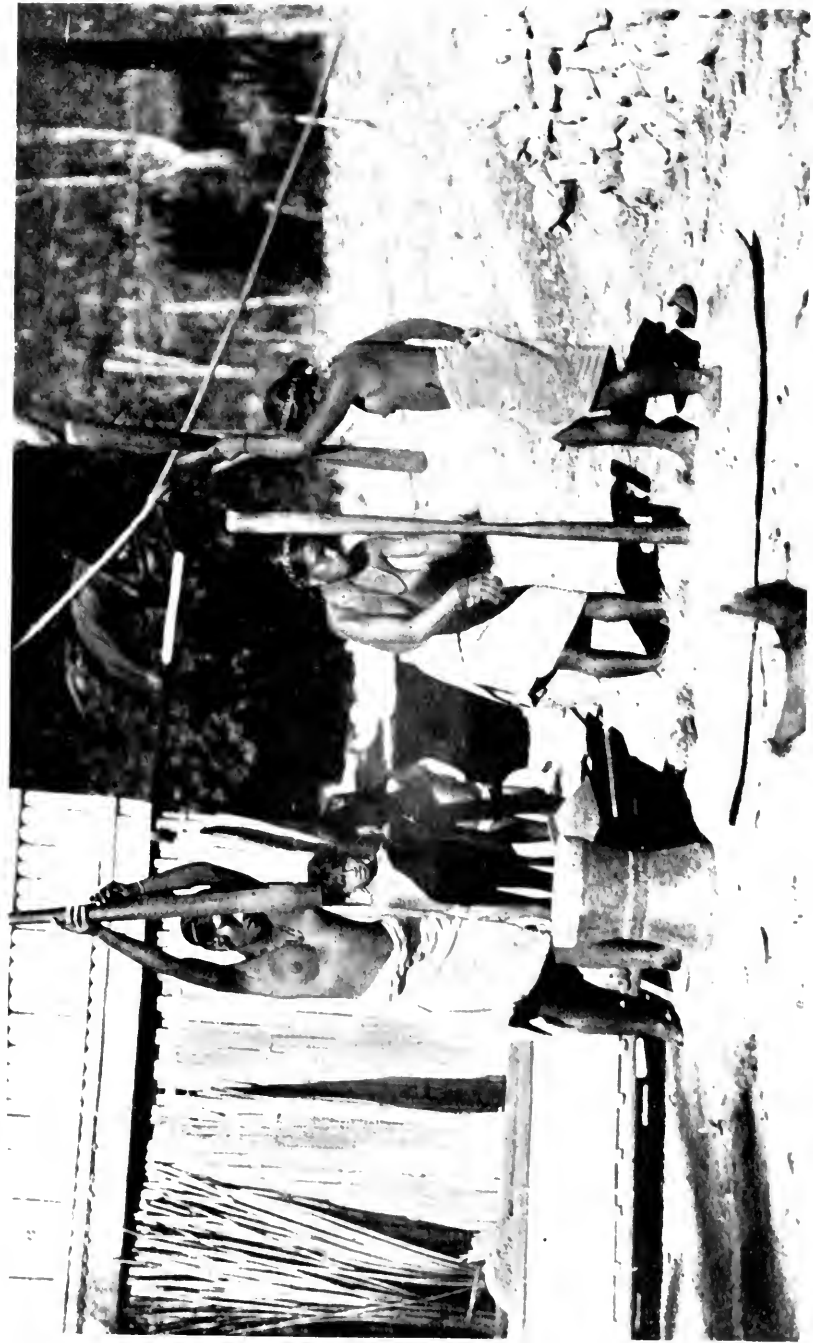
HARVESTING THE RICE (P. 43N).

THE LIBRARY
OF THE
UNIVERSITY OF MICHIGAN



THE RICE GRANARY (p. 430).

THE LIBRARY
OF THE
BUREAU OF THE ARMY



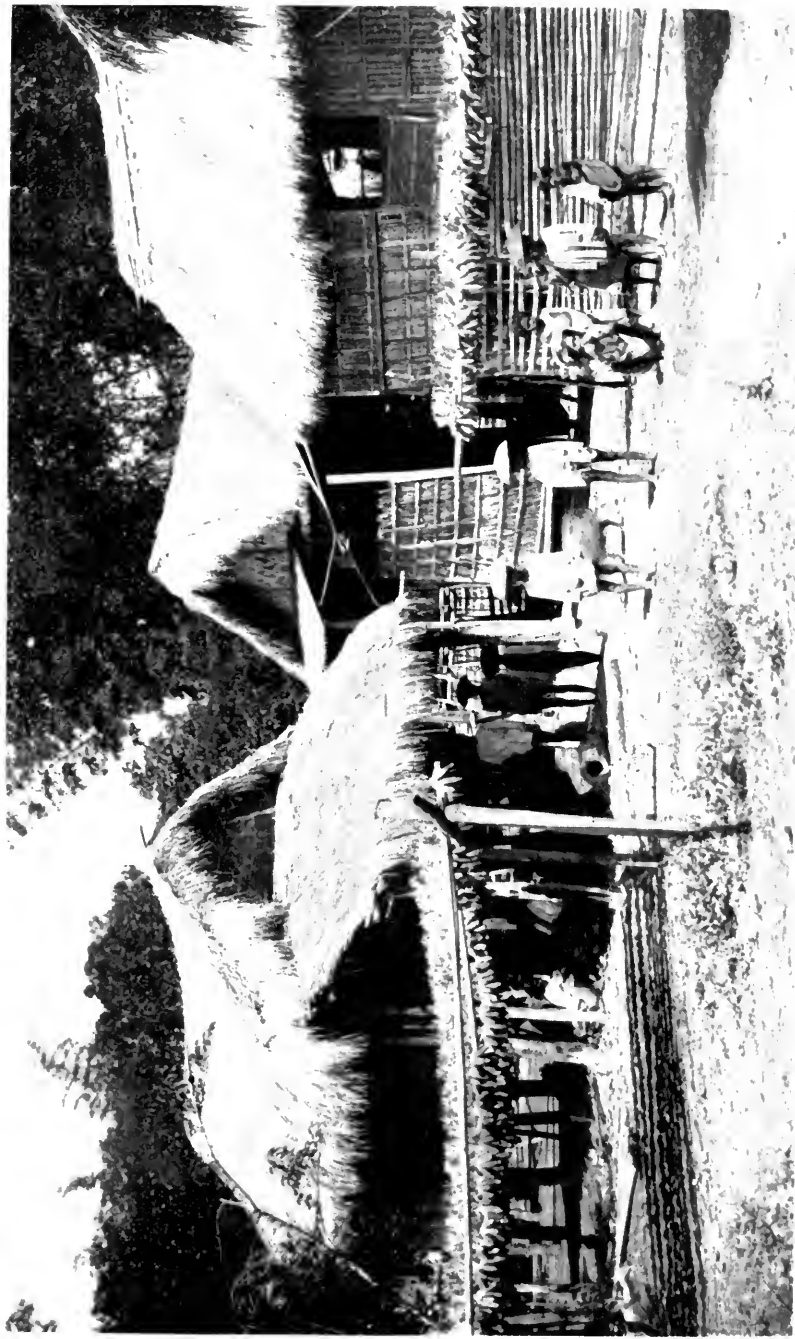
POUNDING RICE.
Photograph from Philippine Bureau of Science. See p. 305.

THE LIBRARY
OF THE
UNIVERSITY OF CHICAGO



WINNOWING AND SIFTING.
Photograph from Philippine Bureau of Science. See pp. 395, 425.

THE LIBRARY
OF THE
MEMBER OF THE BOARD



DRYING CORN (p. 393).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



BREAKING THE CORN BETWEEN TWO STONES (fp. 3014).

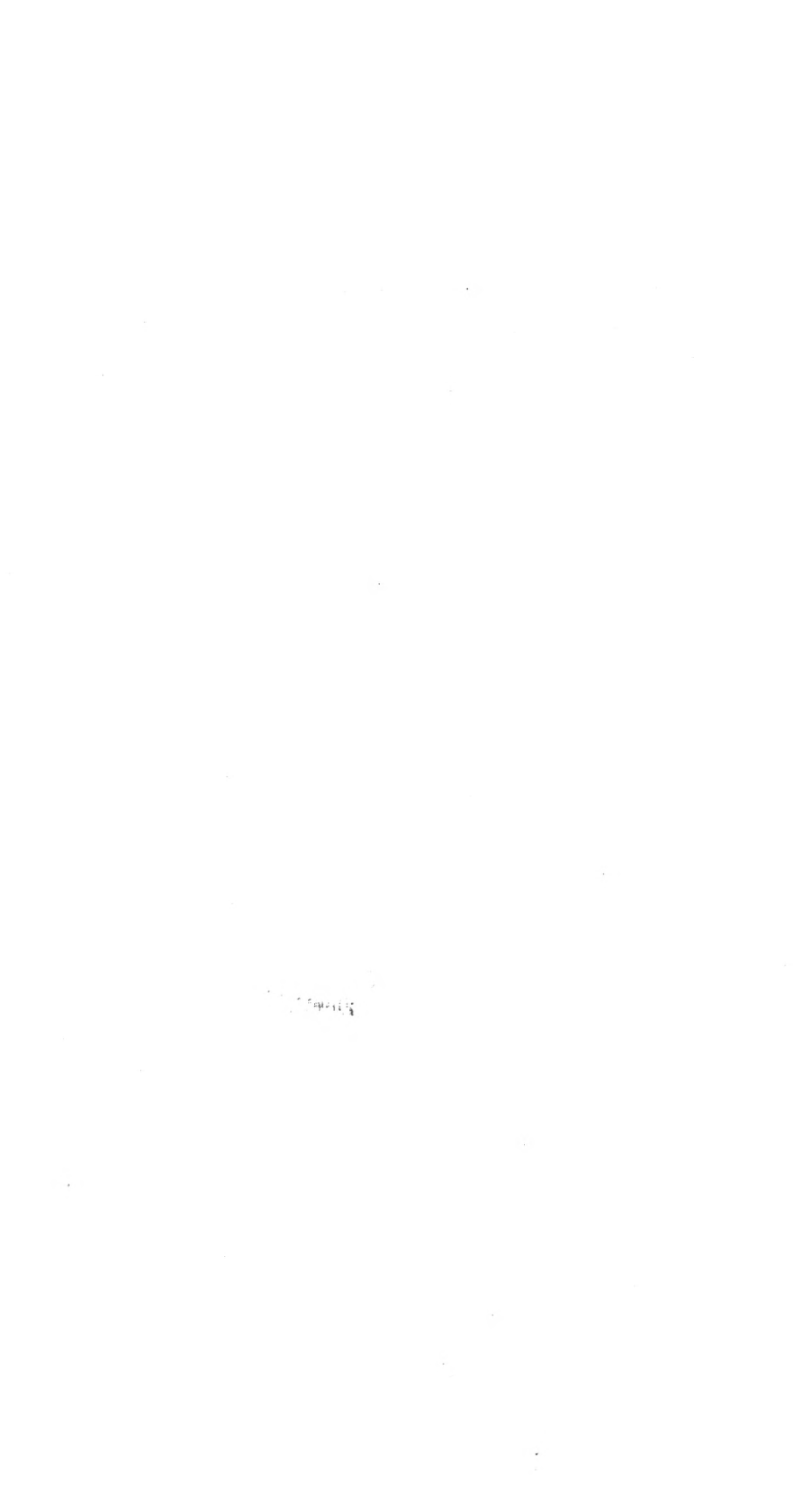
THE LIBRARY

OF THE

STATE OF ILLINOIS



PREPARING TOBACCO (p. 316).





FEEDING THE PIGS (p. 312).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



A TYPICAL FORGE OF THE IRON WORKERS (p. 415).

THE LIBRARY
OF THE
MEMBER OF PARLIAMENTS



GINNING COTTON AND SIZING THE THREAD (p. 117).

THE LIBRARY
OF THE
UNIVERSITY OF MICHIGAN



BEATING COTTON ON A CARABAO HIDE (P. 117).

THE LIBRARY
OF THE
UNIVERSITY OF TORONTO



SPINNING.

Photograph from Philippine Bureau of Science. See page 417.



WEAVING A BLANKET (p. 129).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

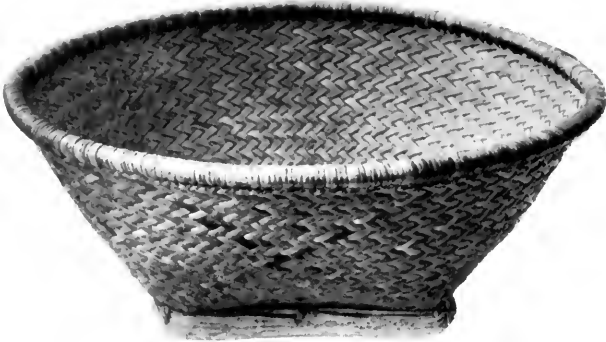


BASKET MAKING (p. 131).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



1



2



3

BASKET TYPES (p. 425).

THE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA



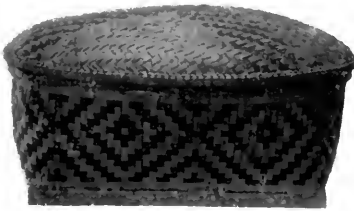
1



2



3



4



5

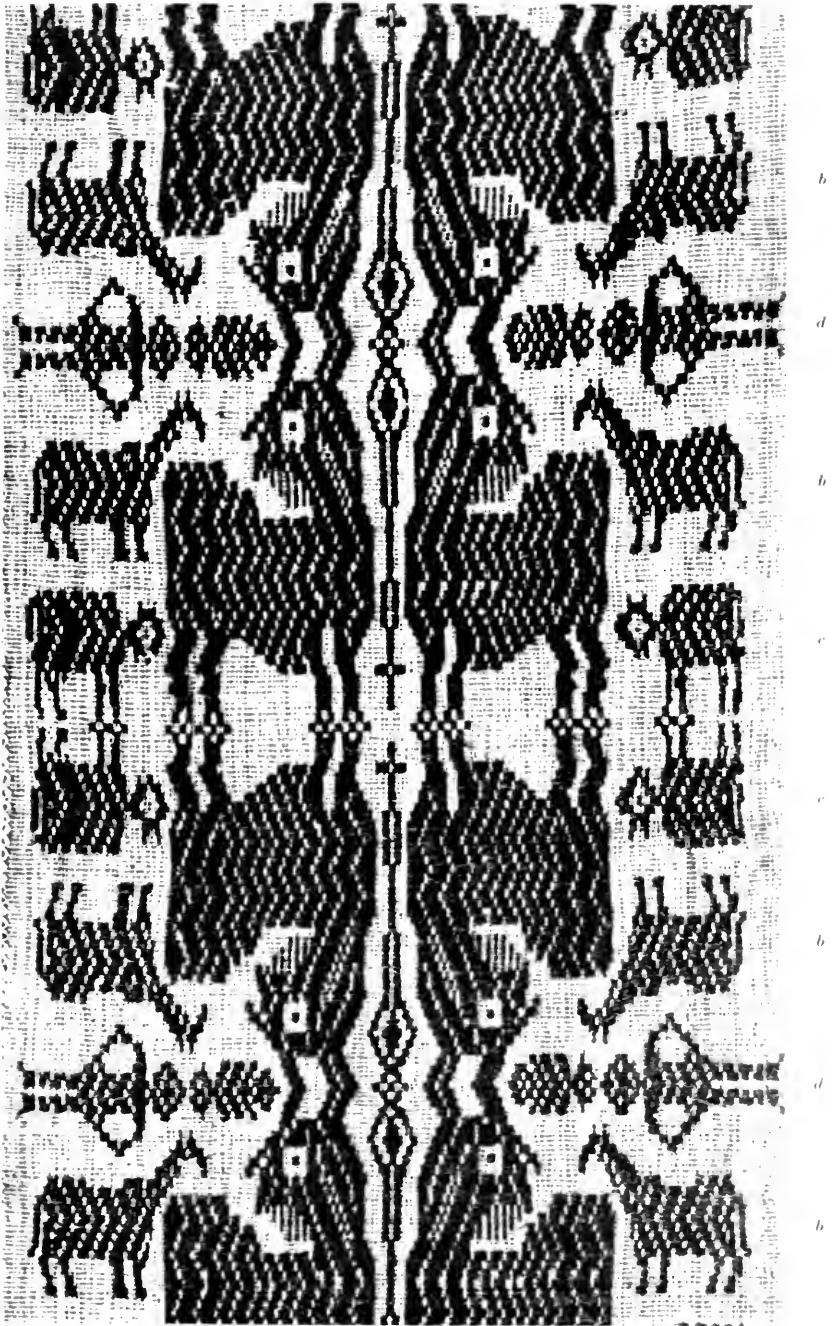
BASKET TYPES (p. 425).

THE LIBRARY
OF THE
MEMORIAL UNIVERSITY OF
EDMONTON



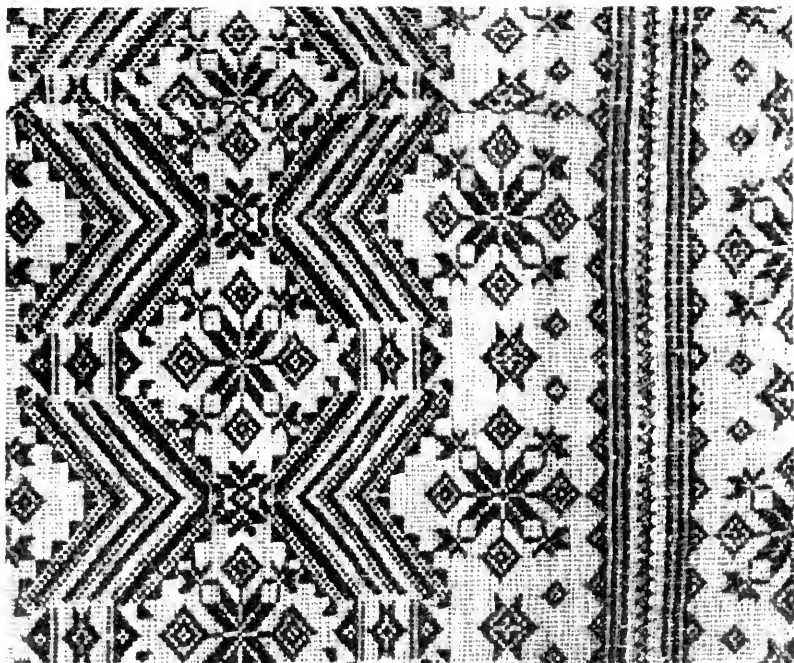
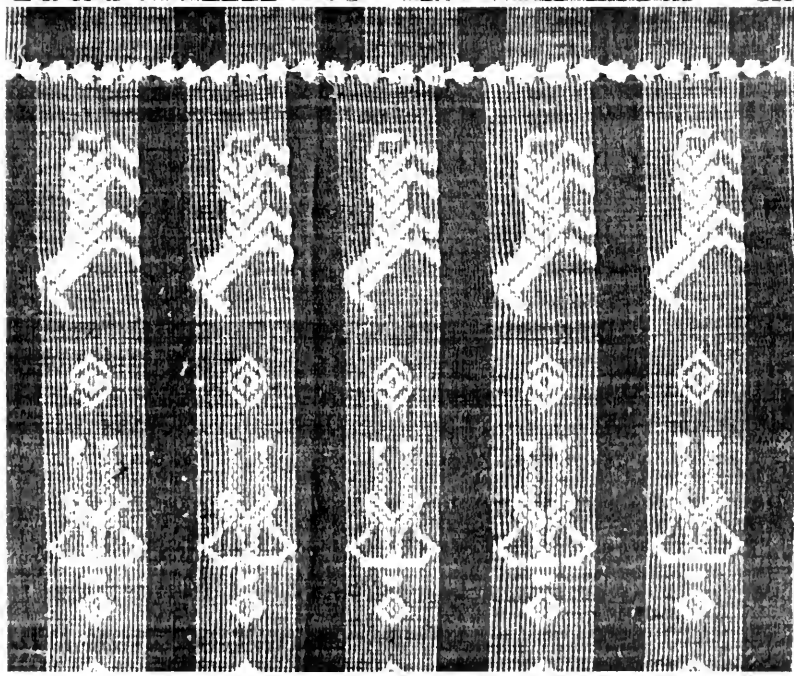
THE NET MAKER (p. 147).

THE LIBRARY
OF THE
CONGRESS



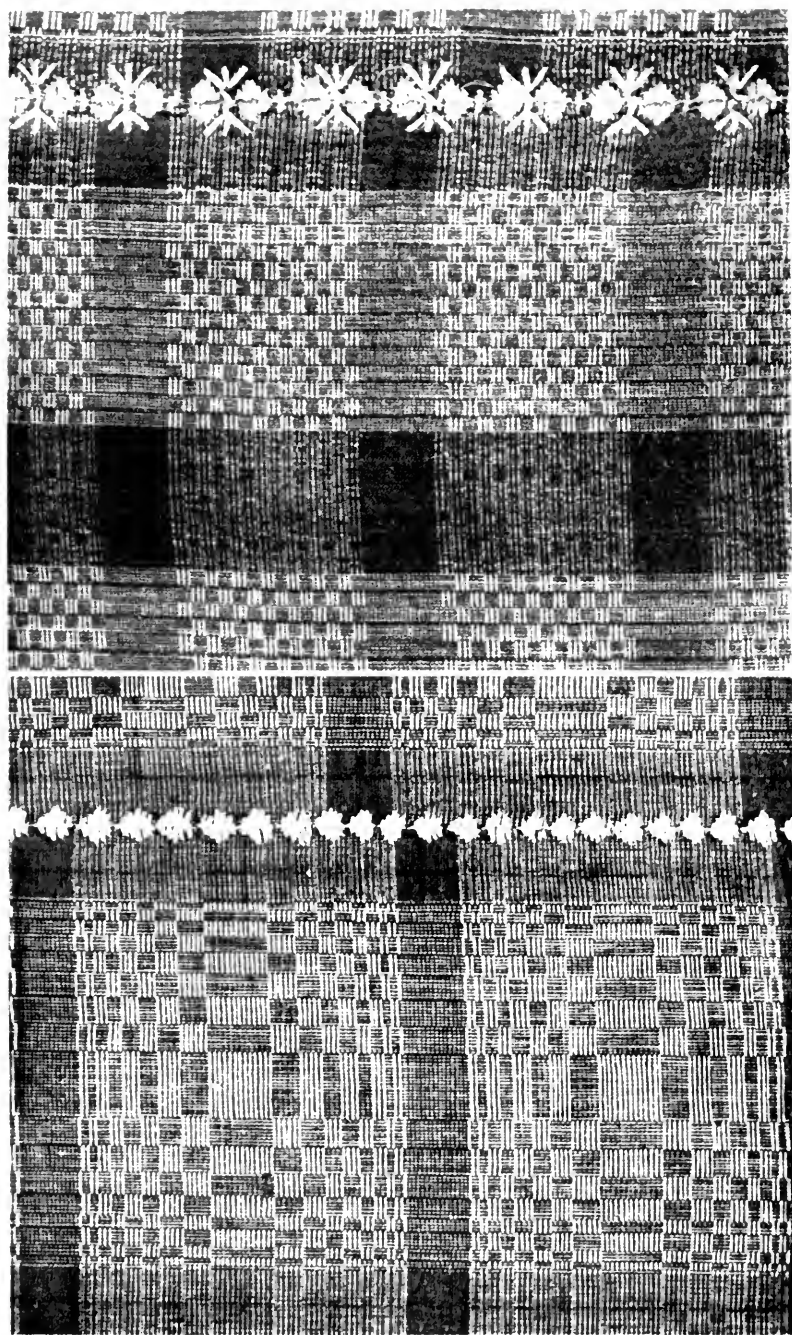
CEREMONIAL BLANKET (p. 430).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



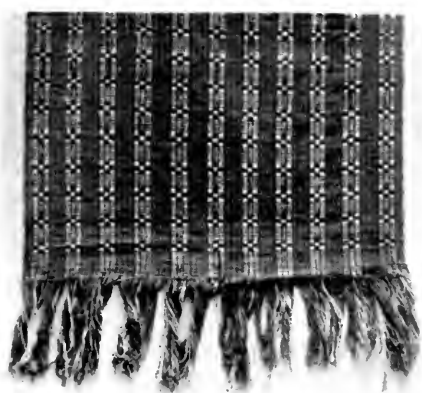
BLANKETS SHOWING DESIGNS (p. 136)

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS

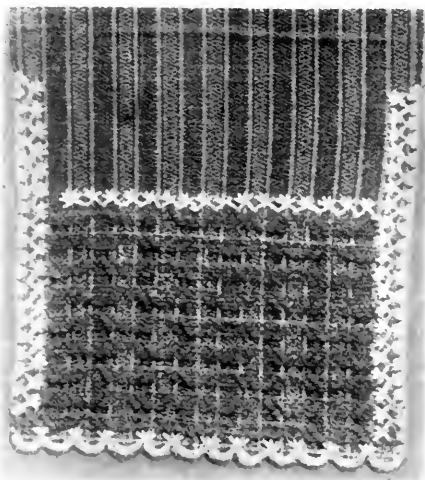


BLANKETS SHOWING DESIGNS (p. 126).

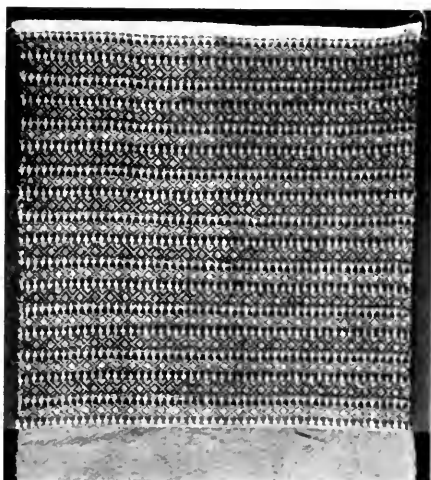
THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



1



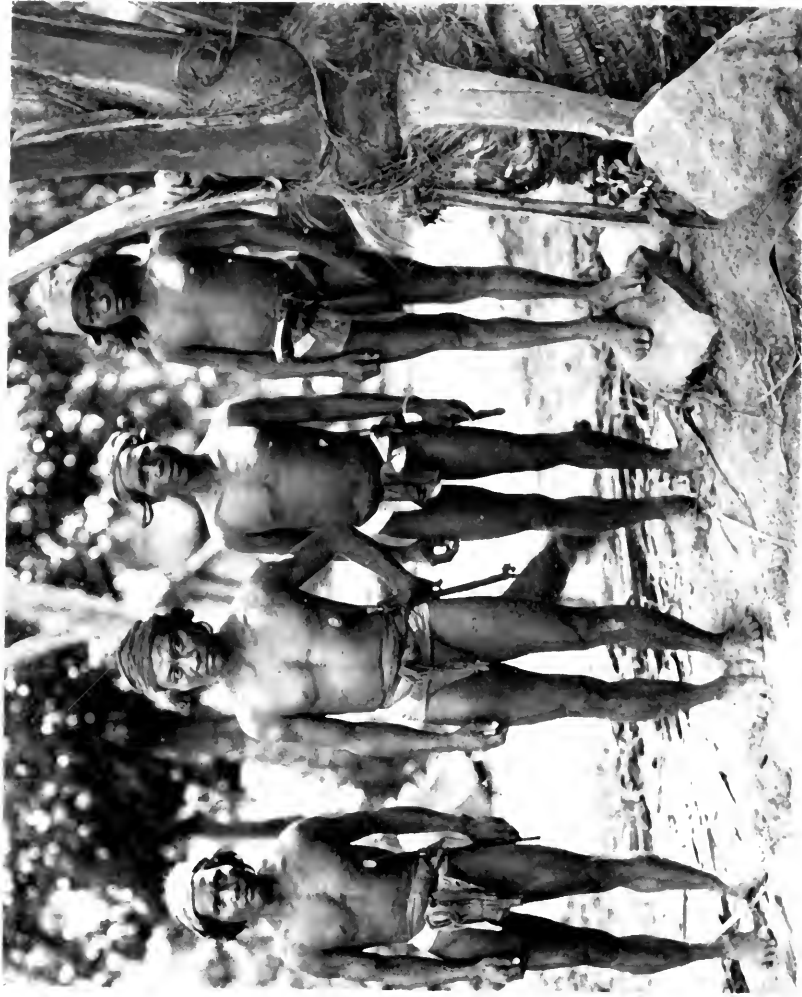
2



3

WOVEN BELTS AND CLOUTS (p. 436).

THE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA



MEN OF SALLAPADIN (Pl. 437).

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



TYPICAL DRESS OF THE MAN (p. 137).

THE LIBRARY
OF THE
UNIVERSITY OF TORONTO



WOMEN IN FULL DRESS (p. 42).

THE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA



CUSTOMARY DRESS OF THE WOMAN (p. 438).

THE LIBRARY
OF THE
CONGRESS

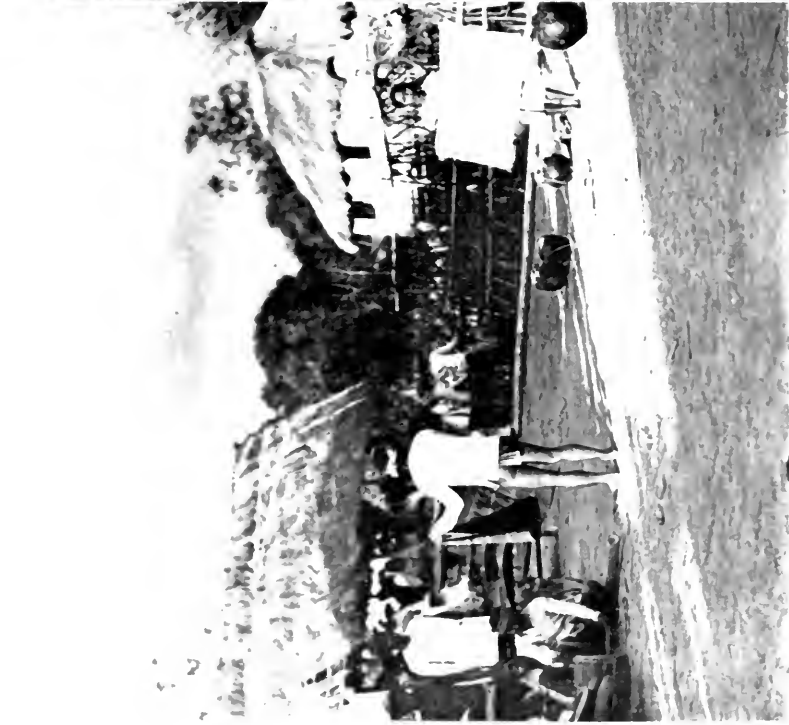


THE LIBRARY
OF THE
UNIVERSITY OF CHICAGO



WOMAN WEARING GIRDLE AND CLOUT.
Photograph from Philippine Bureau of Science. See p. 438.

THE LIBRARY
OF THE
UNIVERSITY OF ILLINOIS



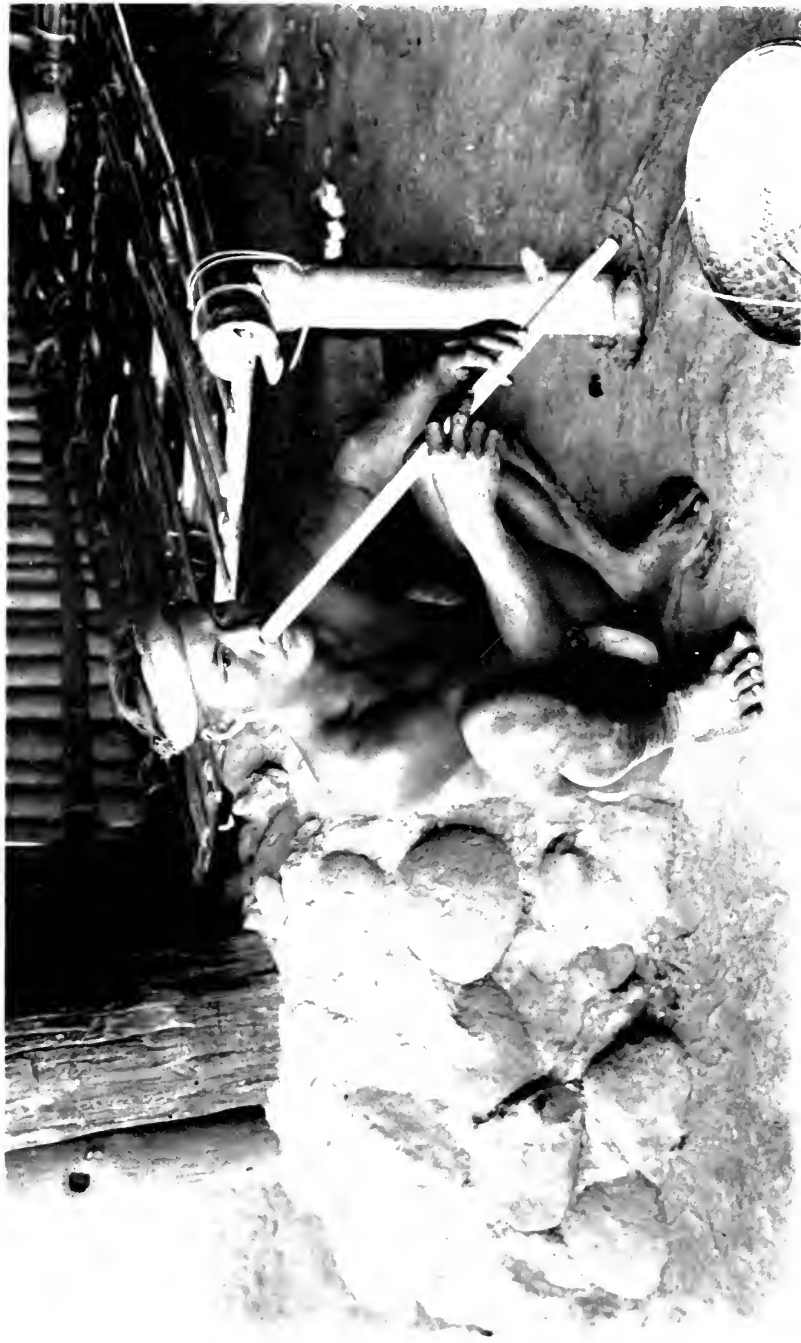
1

DANCING TADEK AT A CEREMONY (p. 110).



2

BEATING THE COPPER GONGS (p. 110).

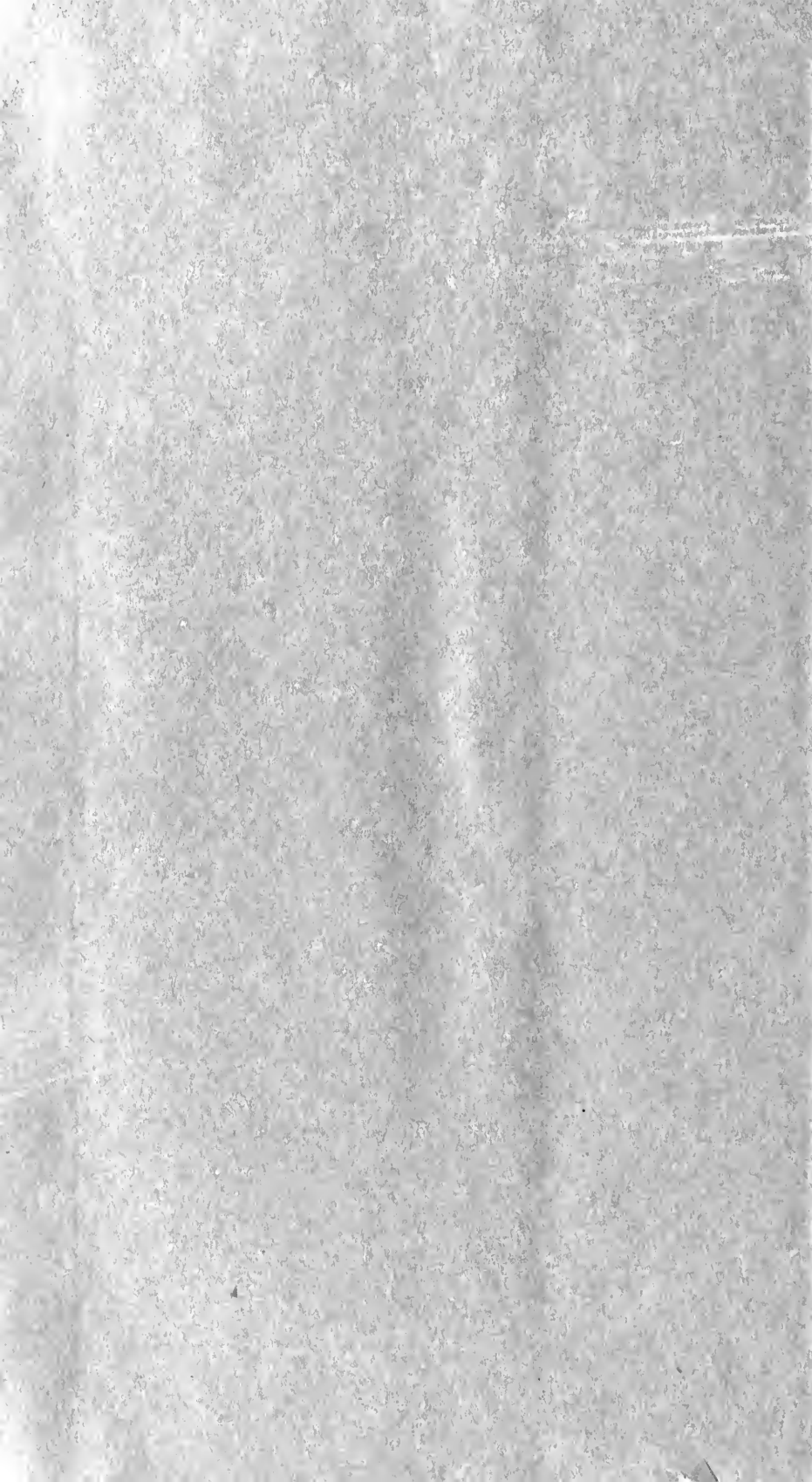


THE NOSE FLUTE (Pl. III).

OF THE
OF THE



PLAYING ON THE BAMBOO GUITARS (Pl. 442).



UNIVERSITY OF ILLINOIS-URBANA



3 0112 039795486