

# The Truth About Inca Civilization

BY A. F. BANDÉLIER

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THE true condition of the aborigines of Peru and Bolivia in the beginning of the sixteenth century is little understood. The general belief is, vaguely, that a vast empire, that of the Inca, embraced the whole of Peru, of Bolivia, Ecuador, and northern Chile, and that this state was ruled by an "Indian dynasty" after a partly military, partly theocratic system. It is thought that the Inca in the course of centuries assimilated the overpowered natives, imposing upon them their creed, language, and institutions; that they organized the entire vast territory into provinces, with governors of Inca stock; that they exercised a despotic control over every phase of life of their subjects, at the same time governing with paternal benevolence. This picture has been for more than four centuries not only the creed but the delight of readers, who were glad to think that in one corner of the earth, at least, such an idyl had been realized.

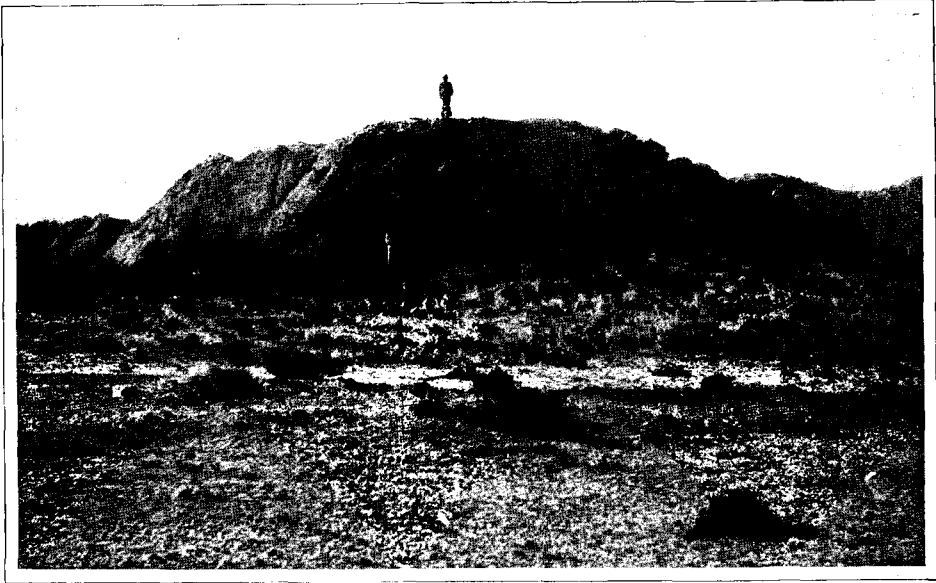
It is the purpose in this paper to divest this subject of the picturesque halo thrown about it by purely legendary lore and to present a true picture of the Inca dominion and civilization—the result of explorations and researches made by the writer into ruins and monuments, many specimens of which were brought by him to the American Museum of Natural History in New York.

The most important and interesting of my explorations, as directly bearing on this subject, was that undertaken in 1895 on the island of Titicaca, situated in the lake bearing the same name, lying between Bolivia and Peru, and 12,500 feet above the level of the Pacific. The myths and legendary lore preserved by many Spanish chroniclers surround the island with a halo of romance to which far too much impor-

tance has been attached. The current story is that the Inca tribes of Cuzco (which overran all of Peru and part of Ecuador) had here their origin, and that in pious remembrance of this fact the later Inca returned to this cradle, erecting upon the island rich sanctuaries and establishing an elaborate ritual. Here there was a rock held sacred by all the tribes around, and, according to legend, bedecked with silver and gold to dazzle the eyes of the people far away on the shores of the lake. This famous rock is near the northwestern extremity of the island, about three miles from Challa, and we made it the first object of our study. Taking the narrow path at the base of the rocky heights of the Calvario, leading to a garden which, of course, is called the "Garden of Inca," though it was planted by the Spanish owners of the island in the eighteenth century. Really of Inca construction are the narrow conduits through which the waters gathering on the hillsides are led into the lake to prevent their soaking the ground—a device creditable enough to the Indians without embroidering on it imaginary landscape-gardening. From this garden the ascent begins, over rocks and narrow terraces to the isthmus of Kasapata.

Here on this green esplanade of Kasapata, overshadowed by the white peaks of the Bolivian Andes, are scattered ruins from the time of the Inca, who occupied the island in the fifteenth century, a generation or more before the European discovery of America.

These ruins consist, first, of a narrow quadrangle of indifferent masonry laid in mud, with undecorated walls and no roof; and, next, of a group of houses, which we unearthed, and out of which we obtained hundreds of fragments of beautifully painted pottery, some cu-



THE SACRED ROCK, TITI-KAKA

The well-known legend that the Inca covered this rock with plates of gold and silver, in order to dazzle their enemies, is now disproven

rious vases of baked clay, made to support the jars and jugs with conical bottoms so characteristically Inca, some trinkets of turquoise and lazulite, copper and bronze tools, and a quantity of llama and deer bones. Here we saw a huge block, a kind of natural chair, on which human sacrifices are said to have been offered, the victims being strangled. Here also we found and opened several graves of children, infants having by preference been chosen for sacrifice.

Three hundred feet higher is the famous shrine, the sacred rock Titi-Kaka—the Rock of the Cat. This is properly the name applicable to the whole group of heights forming the island. The name now often given to Titicaca, the Island of the Sun, has no basis beyond the fact that upon it somewhere stood a house in which the fetish of the sun and other idols were formerly worshipped. The report that the rock was plated with silver so as to shine as far as the lake shore is refuted by the fact that the face of the rock cannot be seen from the shore.

A single building remains that enables one to form an idea of what the other ruins may have been when intact. This is the one on the western slope, called

to-day Chinkana, signifying an entanglement. The Chinkana lies on a considerably inclined plane, with a full and sombre view over the Peruvian mainland. It is built of stone fairly broken and laid in mud, its walls are of very unequal thickness, and the angles are anywhere between slightly acute and moderately obtuse. Owing to the slanting ground, the inferior portions appear like a lower story, but they only stand on a lower plane, and the others are not superposed. The structure, as the ground-plans show, is composed of two wings with a free space between, and is really an entanglement, as a careful measurement of it will soon convince the victim of this laborious task. Although far from large, it is such a conglomerate of tiny cells, narrow corridors, courts, and few moderately spacious halls, that even a compass leads astray. To relate the number of falls, slides, and way-losings that accompanied our survey of this labyrinth would claim a book for itself. Some of the corridors are so low and narrow that I had to delegate my wife for the work of measuring, with the assistance of a diminutive Indian minor. The roofs are not all gone; most of the

gangways are covered with heavy flags of stone laid alongside of each other. As for obscurity, dampness, and chilliness, the Chinkana surpasses anything among the hundreds of ancient ruins it has been our lot to explore.

Concerning this edifice we have some data. It was the habitation of those

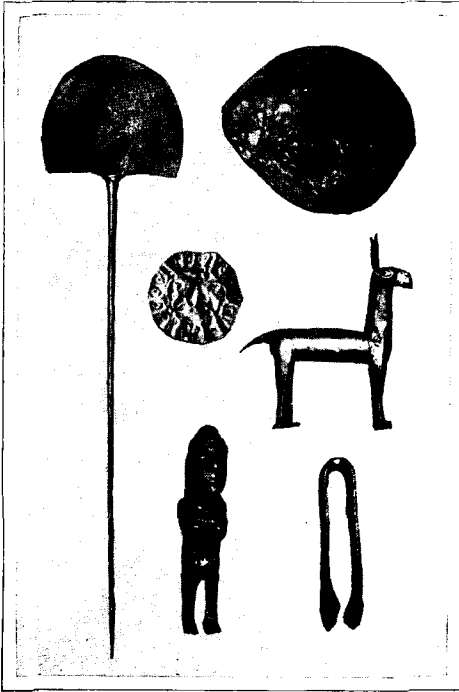
sacrifice. Of these, the American Museum has the only collection extant, and they were exhumed very near the sacred rock and the Chinkana.

It is also possible that here the handsome earthenware modelled after the chaste types of Cuzco ceramics was manufactured.

The Pucara ruins, reached by the ascent from Challa to the backbone of the island, are what is left of a station established by the Inca for pilgrims on their way to the neighboring island of Koati—there to fulfil particular vows.

Nowhere in western South America (or on the American continent) had the pre-Columbian inhabitants reached a conception of society above that of the clan as original unit, of the tribe as an association of clans for protection and subsistence, and in a few instances of a confederacy of tribes for purposes of defence at first, and afterwards of offence. Such was the condition in Peru, Ecuador, and Bolivia. Along the coast every arable valley was inhabited by a tribe of sedentary Indians, not only autonomous, but independent, speaking, if not always a distinct language, at least a dialect of its own, having its own tribal government and its own religious ceremonial. Inter-course between these separate clusters took place, and while it led to trade and barter and was mostly peaceful, hostilities sometimes occurred. It is not known that, previous to the arrival of the Spaniards, any coast tribe had acquired an ascendancy over the others so as to control their destinies or render them tributary.

In southeastern Peru, in the valley of Cuzco, a tribe bearing the name of Inca had quietly grown in culture and numbers previous to the eleventh century of our era. That tribe spoke, like most of the mountaineers, the Quichua language. It had reared a settlement in the high but comparatively fertile basin, and subsisted upon the crops which the chilly climate allowed to grow, namely, potatoes, oca, the milletlike quinoa, and some maize. The habitual segregation of tribe from tribe was enforced in the case of the Inca by topography, the valleys of the Sierra being separated from each other by rugged mountains traversed by



GOLD AND SILVER ORNAMENTS MADE BY INCA  
Pin, disc, bell, tweezers used instead of razor; figures of  
a llama and of a man

whose duty it was to care for the worship addressed to the various supernatural beings believed to reside near the site. It is not improbable even that it was occupied exclusively by women. These victims were a part of the tribute exacted by the Inca from tribes which they overpowered and forgot to exterminate. The women who were there enclosed had, among other duties, to weave ponchos for worship. For the Peruvian aborigines, like all Indians, had ceremonial robes, some of which were to be hung on the fetishes on certain occasions, others to be worn by the shamans when performing in public, still others to be offered up in

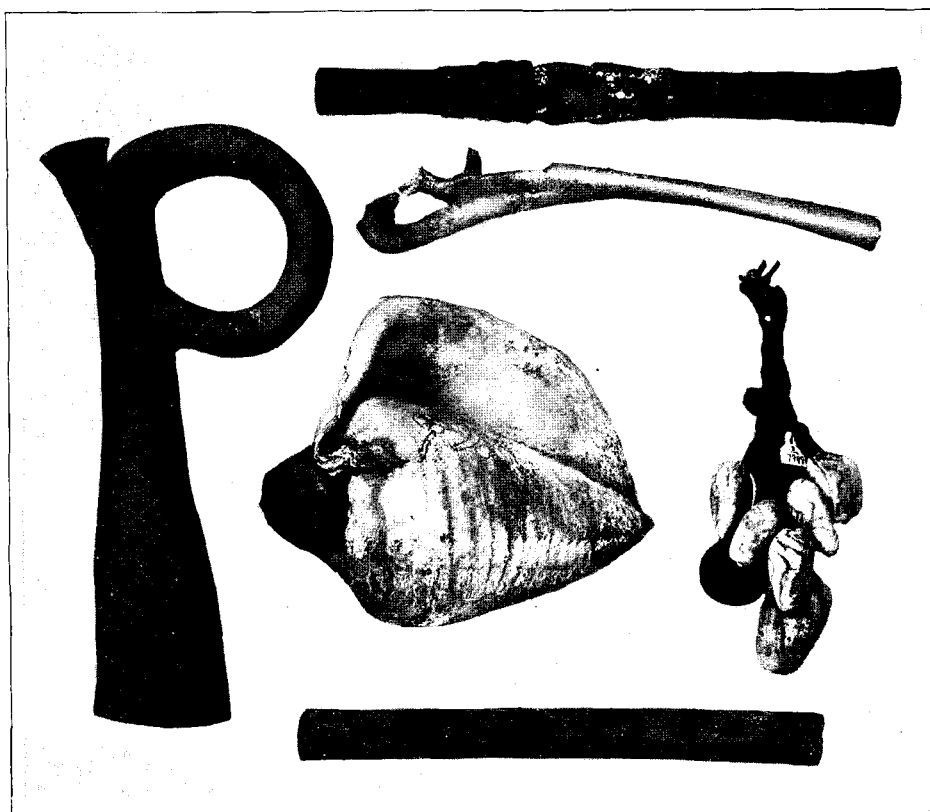
torrents which, as often as a freshet takes place, obstruct travel. Still, the Inca (like all Peruvian mountaineers) had a great advantage over the coast Indians. They owned and reared an indigenous beast of burden, the llama, by which it was possible to traverse deserts with sufficient means of subsistence.

About the twelfth century, in consequence of intertribal warfare in which the Inca successfully held their own against assailing neighbors, they began to raid on those who had formerly raided them. When defeated, they withdrew to their home, access to which could easily be barred in the narrow gorges forming its entrance. When successful, they either exterminated the vanquished or exacted from them tribute and military assistance. The overpowered became tributary allies. Nowhere did the Inca impose upon these a government of

members of their own tribes; nowhere did they establish permanent garrisons or change the mode of worship. The vanquished remained autonomous, unless so refractory or so reduced in numbers that extermination or removal became advisable.

In this manner, slowly and gradually, sometimes in one direction, again in another, the Inca, as much driven to expansion for self-protection as influenced by greed, overcame one after another the tribes of the Peruvian highlands, increasing their military power and tribal sway. Some of their nearest neighbors, like the Aymará, resisted longest, and it is not certain whether they were conquered or if, after lengthy hostilities, they joined the Inca as confederates.

Farther southeast than central Bolivia the Inca did not penetrate. The Quichua-speaking Indians of southern Bo-



MUSICAL INSTRUMENTS EXHUMED BY THE AUTHOR

Clay trumpet; shell trumpet; flutes of reed, wood, and bone; rattle of shells. Unharmed by centuries of burial in Peru

livia and northern Argentine had nothing in common with the Cuzco people except the language; they held the country before the Inca began their career of subjugation and rapine, and never had intercourse with them. Towards Chile, Inca incursions did not reach as far as believed. To the north, following the backbone of the Sierra, they overran Ecuador. The forest tribes of the east they were careful not to disturb.

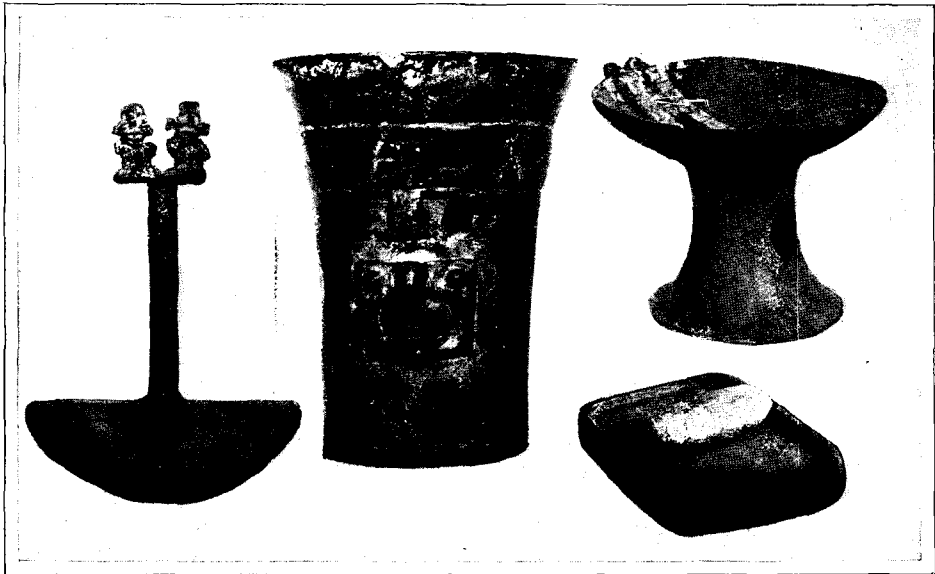
The Indians of the coast were as highly advanced as the Inca, and several of their groups almost as numerous, but the latter had the advantage of *descending* from the mountains by following a constant supply of water. The rivers diminish greatly in volume as they reach the coast, and by seizing (often after long struggles) the outlets the Inca held these valley tribes at their mercy. In this manner they overcame the coast peoples one after another, and it is possible that one very numerous tribe (Chincha) became, not their tributaries, but their allies.

When the Spaniards first reached the coast of southern Ecuador they heard indefinite reports about a warlike tribe dwelling far to the south in the moun-

tains and called "Cuzco." These Cuzco people were feared, for at any time their war parties might sweep down upon the coast villagers. When Pizarro, following these indications, marched into the interior in search of the "Cuzco," he came to settlements the inhabitants of which acknowledged to be tributary to the latter. He also met, finally, an Inca tribute-gatherer, but nowhere did the Spaniards find Inca "governors" or Inca "garrisons." There were storehouses for tribute, and buildings to which the term of "houses of sun-virgins" or "vestals" has been applied, but which bore an entirely different character.

Nowhere, either on the coast or in the highlands, did the Spaniards see the least trace of an attempt at forming a homogeneous nationality; every tribe ruled itself as before its subjugation by the Inca.

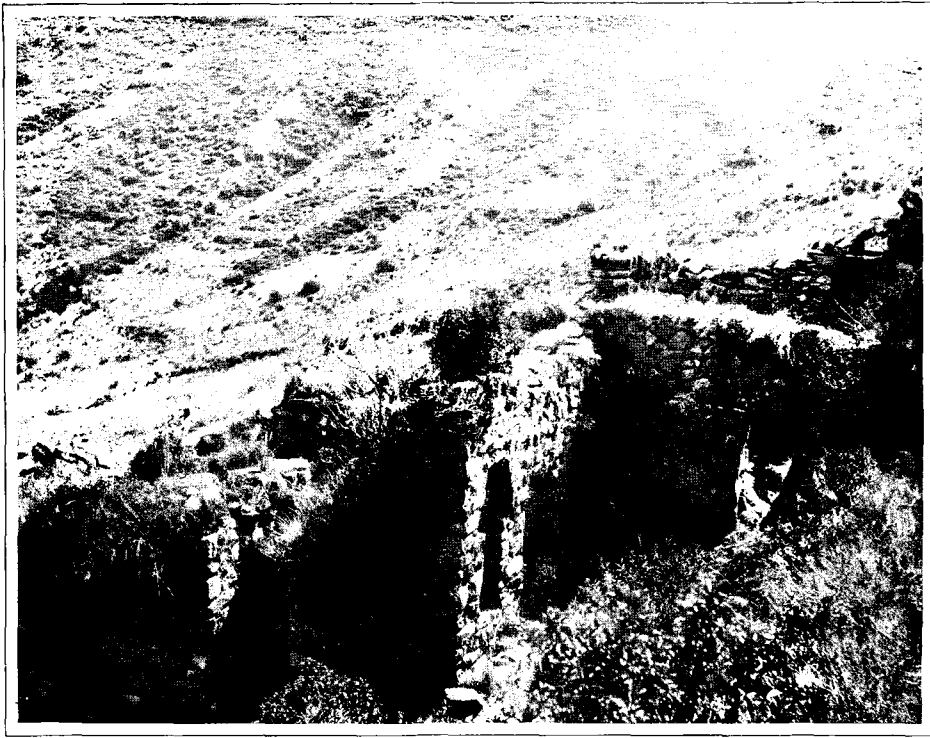
It has been frequently stated that a gigantic road system, due to the Inca, traversed western South America from Chile to Ecuador in two parallel lines, one following the highlands and the other the seashore. Roads of ancient make exist in various places, but they are not after a general plan and not connected.



UTENSILS OF AN INCA HOME

Chopping-knife of copper, handle decorated with carved figures of man and woman; wooden cup for libations; brazier for popping corn, and below it a corn-grinder





RUINS OF THE CHINKANA, OR "HOUSE" OF ENTANGLEMENT"

These roads or wide trails I have seen often and measured in the course of eleven years of explorations, and have found them to be ways of communication between neighboring tribes, made by these tribes previous to Inca sway. Bitter are the complaints of the early Spaniards, when they describe their first march to Cuzco, over the absence of trails, even in the vicinity of that settlement.

The word "Inca" designated the tribe that dwelt in the valley of Cuzco, and not a royal family or dynasty. That tribe consisted of at least twelve autonomous clans locally separated from each other, but forming one extensive settlement. The numbers of the tribe have always been exaggerated. If we admit seventy thousand souls as a maximum, we are still above the truth.

What is left of ancient remains through the present Spanish city of Cuzco justifies this estimate, and it is further confirmed by the descriptions of eye-witnesses (like Bishop Valverde) and by the official report on the distribution

of building sites to the first Spanish settlers. We gather the impression that Cuzco, like the (almost equally large) settlements on the Peruvian coast, was an extended cluster of groups of dwellings and spacious courts, so that it presented a deceptive appearance as far as actual population was concerned. Each clan formed a village inside of the whole, with its own places of worship and official building, for each clan was autonomous, with a council of elective officers, who acted as long as they were able or not removed. There were executive chiefs, elective also, and under that council's control. Finally a delegate was chosen who, with those from the other clans, constituted the supreme council and chief authority of the Inca tribe. Chosen by that council, with the oracular guidance of the medicine-men or shamans, and installed through the latter, a head war-chief acted for life, or as long as not deposed. To this officer the name of "Inca" has been given by tribes outside, whereas his proper title was entirely dif-

ferent. The notion of succession by heredity is set aside, first by the (involuntary) confessions of such as claimed Indian origin after Spanish occupation, and besides, by the rules of descent in the clan, which was in the female line.

We have been told that the Inca worshipped the sun as principal deity, and that they had an idea of monotheism. The latter is disproved by all unprejudiced statements. The "creator" of the Peruvians is as much a misconception as the "Great Manitou" of the Indians in North America. The Inca worshipped not only the sun, but the moon also, and certain stars and the elements; and stones of peculiar shape, color, and size, and especially tall mountains or striking rocks, had their shrines, where medicine-men were in constant attendance, to give oracles, and to receive offerings in return, which were either burned, buried before the shrine, or kept for the benefit of the attendants.

This entailed the erection of storage buildings in connection with places of worship. The religious structures of the Inca consisted of clusters of edifices, small in size, though large in number. The shrines proper were small and dingy. Idols were of stone, sometimes also of

gold, silver, and, rarely, of wood. What is known of them leads to the inference that they were chiefly crude representations of human forms; also natural objects, like crystals, striking concretions, and blocks strangely colored. The creed of the Inca was an elaborate fetishism.

The Inca had the rudest notions possible of astronomical phenomena and their periodicity. They had lunar months, and noticed only the solstices, which is easily explained by the fact that in those regions there are only two seasons distinguishable—a wet and cold summer and a dry and cold winter. The equinoxes were not marked by any striking phenomena.

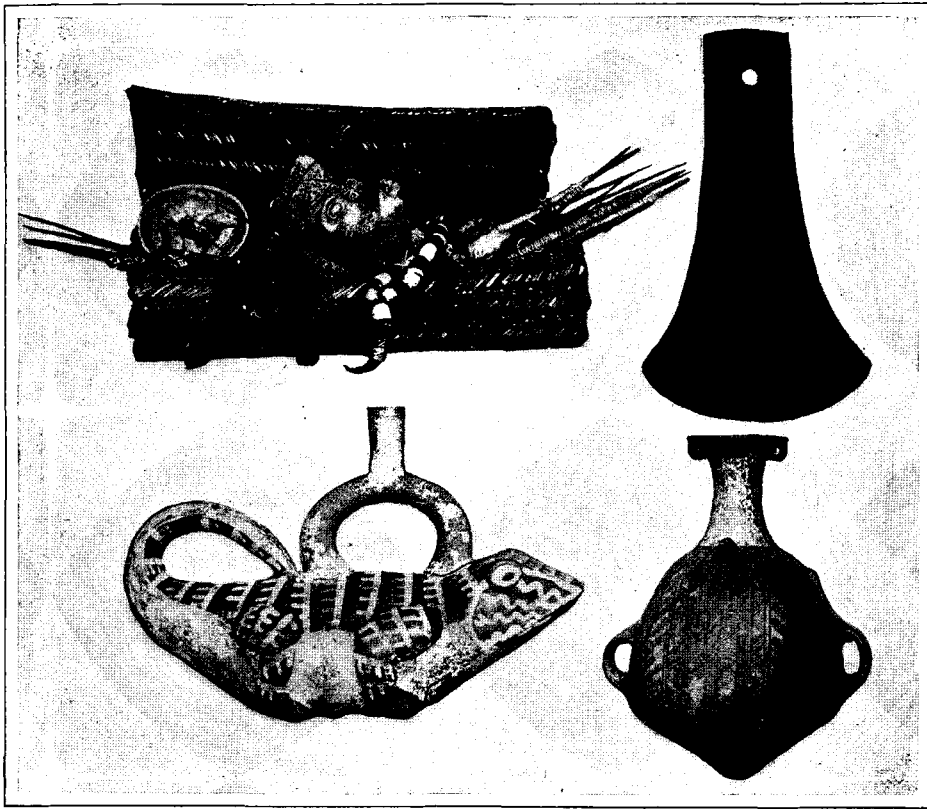
The main staple of food was and is the potato, which is planted at various times of the year according to variety and locality. Implements for tilling the ground were of stone and copper, or of a bronze empirically discovered and accidentally combined. The Peruvian highland in general is very broken, and there are no extended levels. The coast valleys also are not extensive. So the very steep slopes had to be cultivated where possible. For this reason the Indians resorted to the scheme of narrow terraces, covering declivities like steps and faced with stones to prevent their being swept away by torrential rains. These terraces are found not only in South America, but in New Mexico, Mexico, and Guatemala. Their large number in South America is not, as often asserted, evidence of a numerous ancient population.

Art and industry among the Inca were quaint rather than beautiful. They knew how to wash gold, to fuse it in small quantities, and to hammer it in very thin sheets easily folded and bent into any desired shape. They melted the least refractory silver and copper ores, but cast objects are much more rare than hammered ones. Their bronze is an accidental alloy, and it has not yet been discovered where the tin was obtained. On the coast, where ores are less abundant, ancient metallic objects are comparatively more numerous than in the mountains. In general, the industrial art of the coast villagers appears to have been slightly superior in some respects to that of the Inca, and it cannot be



CLAY WATER-VESSEL

Representation of a man beating a drum



HOUSEHOLD ARTICLES A THOUSAND YEARS OLD

Work-basket buried with mummified woman, containing spinning-tools, comb, raw flax, little dishes, and handful of peanuts. Also copper axe-head, pottery figure of lizard, and water-bottle of clay elaborately decorated in colors

too much insisted upon that the antiquities from the Peruvian coast are the work of a people whom the Inca overawed but who had nothing in common with them in language, and had developed their culture independently.

The pottery of the Inca is totally different from that of the coast. It is inferior in plastic decoration, but the forms are chaster, more severely beautiful. Paint, not modelling, was the basis of ornamentation. For textile fabrics the Inca possessed wool of the llama, alpaca, and of the vicuña. This last is very fine, and therefore adapted to decorative tissues. When tightly woven it becomes impermeable. The ponchos and smaller articles of dress, destined for ceremonials, were usually made by the inmates of what have been improperly termed houses of virgins. They used the same kind of aboriginal looms gen-

erally known in America, and produced fabrics of astonishing elaborateness and solidity. It is known that on some of these garments as many as fifteen years were spent, the girl who wove them obtaining thereby a longer lease of life and sometimes immunity. In art and industry the peculiar Indian trait of utter disregard of time was the main feature.

This feature is noticed in building. Inca architecture is peculiar in that its stonework is strikingly well done though plain, considering the implements (stone mauls and tools of copper and bronze). The intentional tempering of bronze, mentioned as a "lost art," is a fable. Instead of binding with mud, the Inca fitted the blocks by patiently rubbing the sides that had to join, and mostly (not always) the faces also. In many constructions the blocks are very large, and their transport was effected by means of



wooden levers, ropes of llama hide, and possibly rollers of wood. There is no timber on the table-land, but in the few valleys on the eastern declivity of the Andes, where Inca constructions exist, it is abundant. For hoisting, inclined planes were used, of rubble or earth. The roofs were of thatch, as in many places to-day, only narrow passages and small cells being covered with slabs, and in some cases a bastard arch formed the ceiling. The dwellings were small; official houses and ceremonial buildings had large halls, and most of the important ceremonies were performed in open squares. Their fortifications were not for permanent occupation by a garrison, but temporarily held for defence or as places of refuge. They are massive facings of high terraces, either cyclopean or in courses closely joining.

In all these structures absence of symmetry is noticed. Angles are only true as an exception, the circles not perfect,

the vertical is an accident. The Inca attained a near approach to exactness, but lacked the simplest devices of mechanical engineering. Massiveness gave solidity, and polish protected against scaling, perforation, and decay. The palaces spoken of are myths.

The Inca were beyond doubt a successfully warlike tribe. None of the tactics, however, displayed in their encounters with the Spaniards rose above the level of those used by other Indian tribes.

While this picture of the Inca and their culture is far from complete, it presents them in the light in which the documents from the period when their primitive condition was yet scarcely impaired, and in which my eleven years' study of their country and remains, and twenty-three years of constant intercourse with Indians in both hemispheres for purposes of investigation, actually places them.

## Realization

BY *BURGES JOHNSON*

OF the fabric of filmy dreams, Dear,  
 I wrought in the days gone by,  
 And I built me a land whose golden strand  
 Lay under a shining sky;  
 None knew the road to that far abode  
 Save only my dreams and I.

There were paths for my every whim, Dear,—  
 Hills for the boldest view,—  
 For humbler moods the valley roads  
 To deeds that I meant to do:  
 And byways fair found vistas rare  
 All fashioned of hopes come true.

There came a maid to my dreams, Dear,  
 One time as I wandered wide,  
 And it scarcely seemed that I could have dreamed  
 That we wandered side by side;  
 For hand in hand we roamed the land,  
 And the world was glorified.

That realm is fading away, Dear,  
 Its heights I can scarce define;  
 The winding road to that far abode  
 Is a tangle of weed and vine.  
 Yet—wondrous thing!—though the dreams took wing,  
 Her hand still rests in mine.