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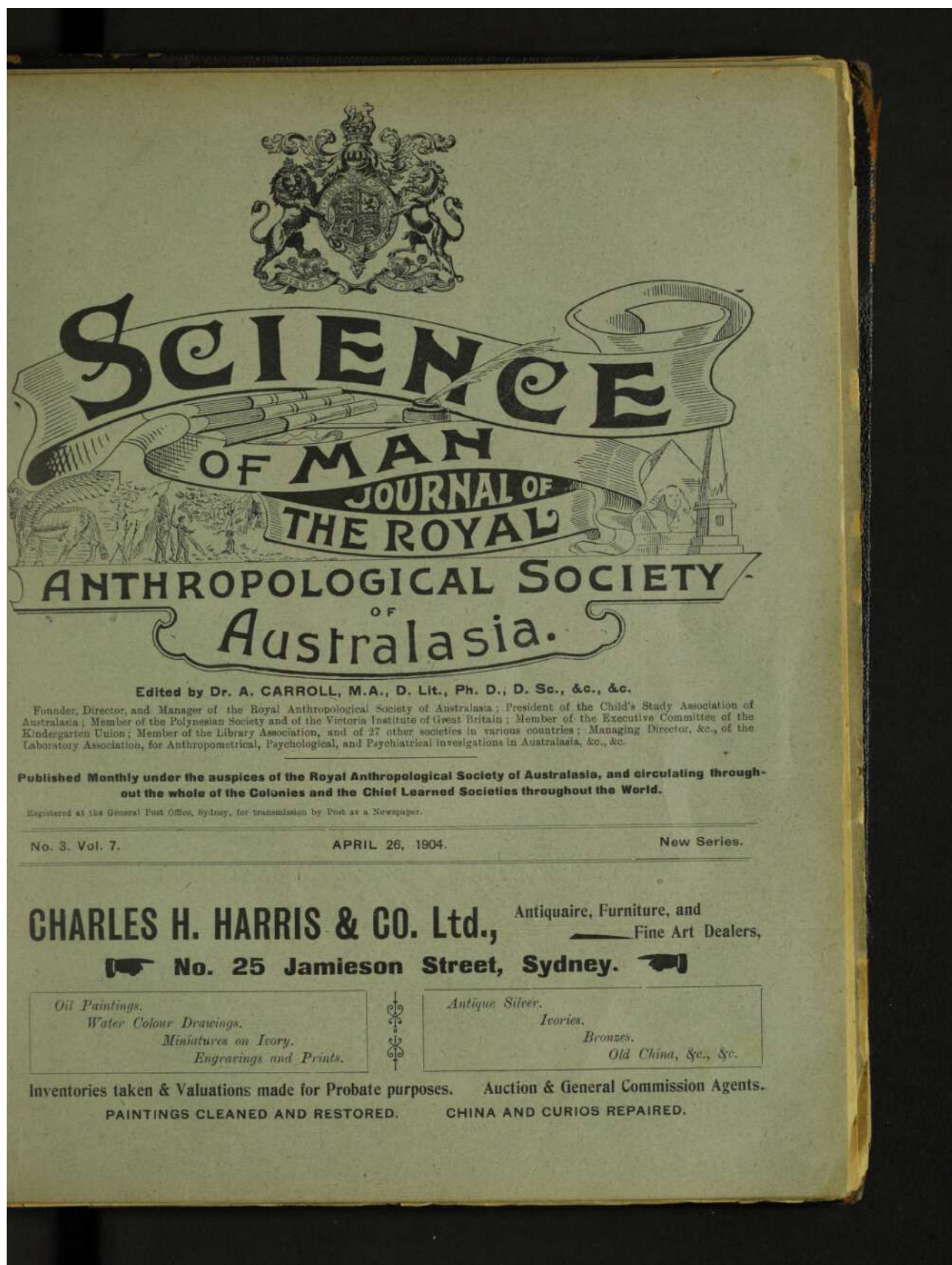
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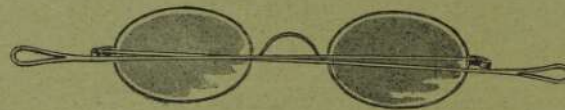
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SCIENCE.

April 26, 1904



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# SCIENCE OF MAN

And Journal of the Royal Anthropological Society of Australasia.

VOL. 7 No. 3.

SYDNEY, N.S.W., APRIL 26, 1904.

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# SCIENCE OF MAN

And Journal of the Royal Anthropological Society of Australasia.

Edited by Dr. CARROLL M.A., D. Lit., Ph. D., Sc.D. &c., &c., &c.

No. 3, Vol. 7.

APRIL 26, 1904.

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## EDITORIAL NOTICE

ALL literary contributions should be addressed to the editor, Dr. A. Carroll, Sans Souci, Kogarah, Sydney, New South Wales. Queries and answers, photographs, together with journals, exchanges, books, etc., should be addressed to the Society, 7 Lincoln's Inn Chambers, Elizabeth-street, Sydney.

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## SCIENCE OF MAN

Journal of the Royal Anthropological Society of Australasia.  
The Official Organ of the Royal Anthropological Society of Australasia.

SYDNEY, APRIL 26, 1904.

## THE MONTH.

THE Royal Anthropological Society of Australasia, has, during the past month, been conducting its correspondence, and also the hon. general secretary has in other ways

been endeavouring to promote the interests of the society. The hon. librarian has been receiving and storing up the publications sent in exchange to the society, from the learned societies of foreign lands. All the archaeological specimens coming to the society have been placed under the care of the hon. curator, and have been exhibited to the members for their examination and remarks thereon. Correspondents continue to request the hon. general secretary to obtain from the members who have studied such subjects, the meanings of the place names, and other of the native words. The journal is being continuously asked for by foreign societies, to place in their libraries for reference by their members. The most interesting anthropological items in the exchange publications are noticed in the journal, so that any member wishing to know more of these subjects can refer to or consult the publications placed on the table of the reference branch, by applying to the hon. librarian at the office.

The director had a most agreeable interview with the Secretary of the Colonial Government of New Guinea, who has kindly promised to forward to this society any anthropological information that can be procured in that British possession, and he has already brought to our notice that among the many crisp-haired Papuan tribes of New Guinea there is one tribe that has long, straight hair, and as the hair is an important feature of races, this find shows that a straight-haired

race has left representatives in New Guinea. There are other matters in that great island which we hope soon to receive and place before the members of this society, and before the readers of this journal.

For the introduction to this gentleman, we are indebted to our energetic member, Miss G. King, and that learned lady student of ethnology and the physical sciences, is now engaged, at her own cost and trouble, in collecting specimens of the palaeolithic implements of Tasmania, and those in Australia, formed and used before the present neolithic people came there. We hope soon, at a special meeting called together for the purpose, to bring before the members of this society, for their inspection, and also to have photographs of these inserted in SCIENCE OF MAN, so as to bring them before foreign readers of our journal and the societies to which it is forwarded as an exchange publication.

These chipped flints of Australia and Tasmania are far older than the ground implements; these palaeoliths belonging to the Papuan and the Negrito ages, long before the Dravidians with their axes, and other things, made by grinding, came to Australia. A search is now being made for the crania of these distinct races, which when found will be brought before the members of this society, for their study, and to prove the more ancient races that were formerly in Australia and Tasmania. Very erroneous ideas have come from



the reports of the expeditions sent from European societies, to examine the Australian blacks. Their time was too short in Australia, and the tribes they saw were too few to enable them to obtain the truth about the ethnology of the various races of Australia. The time and opportunities enabling our society to obtain facts which these hurried expeditions would not obtain, and they being among a few tribes, and our members and collectors obtaining information from tribes in all the different districts, with all the varied speeches, customs, rites, and other matters; and studying and comparing all these reliable results are secured.

The reforms recommended in *SCIENCE OF MAN*, by this society, have so stimulated the public that every day fresh advances are made therein. The instruction and education of the young in Australia, which was said to be so perfect when we began our reform agitation, and have now been realised to be so imperfect that reforms are now advocated by all.

The degeneracy which we shewdeto exist is now seen by all. The decreasing *birth rate*, which we proved to be getting worse, is now a subject of public discussion. The *defects and deficiencies* in the children, which we advocated the examination and removal of, are now seen to be getting worse, by all who study children. The increase of lunacy, the spread of intemperance of various kinds, which we maintained demanded more scientific treatment, is now agreed to by experts and the public to require immediate attention for treatment and removal. The deaths of about 4,400 infants before they are a year old, can be prevented by appropriate means, as we have shown, and should be at once attended to.

The psychology, which all should understand, to prevent mental delusions, is still taught in the fallacious, metaphysical modes of the dark ages, instead of by scientific modes of procedures.

There are these above referred to, and many others that we must be continuously working at, to build up a strong nation here, and to remove the dangers that are not only threatening, but are rapidly growing into large proportions among all classes of this community, to its injury in various ways, leading to gambling and excessive amusements of both sexes.

We see a great quantity of printing

in the newspapers upon the unemployed and the want of work, and the overcrowding from the country into the towns, but we find the Chinese growing and selling the vegetables, and the Italians in the fruit trade. Why are Australians not able to carry out these businesses as well as these now in them? Then there is the rabbits; why cannot the unemployed catch the rabbits and sell them to the freezers and exporters, and thus find profitable employment, and remove them from the country, where they eat the food of the sheep and cattle? Then as cotton is now so much required, there is a good opportunity for the unions to take up land in the north, and employ superintendents who can teach men how to grow it, and thus profitably employ the unemployed to go to the north and grow it each year, as a valuable export to Great Britain. Sugar, tea, coffee, and other articles of constant ready sale, could be grown in the lands of the north in suitable places.

These and a number of other subjects, must occupy the thoughts of those who deal with the *SCIENCE OF MAN*, so as to learn what men have done up to the present, and what they may do for developments in the future, for if the great resources of Australia are not made use of by the present people, some other races will in the future seize and utilise them.

The war now in progress between Russia and Japan must have an important influence upon Australians, for if Russia conquers, with her intention of seizing all lands possible, there will soon be an advance into Australia. If Japan conquers, she will for the present be contented with Korea and Manchuria, but her traders will compete with Australians, while Russia would prevent Australians trading in her territories. Australian trade is at present protected by the British navy, but that cannot always be maintained upon the same terms as at present. If Mr. Chamberlain's plan is carried into practice, the favoured position of British commerce will bind the British navy to protect British trading, and stop foreigners "dumping" their cheaply-produced goods into British colonial markets.

These, and other seriously important matters, we have kept before Australians, with a view to their actions thereupon, and now we request them to act with us to bring about reforms urgently needed, that a great and

powerful nation may be caused to grow up in Australia, and occupy this magnificent continent and develop its resources. As many of the reforms in instruction, intemperance, infant mortality, etc., that we have worked for have now received public attention, we request all those who are patriotic enough to desire the prosperity of Australia, to become members of this society, which not only studies, but also proposes the correct methods of carrying out the needed reforms, and thus united with us, the reforms required may be soon carried out, and all in this country benefitted thereby.

#### Extracts from Current Literature.

THE *Scientific American* says Dr. Danysz, of the Pasteur Institute, has found a bacillus culture, which, placed on bread, will destroy rats.

The commerce of Korea with America amounts to 15,000,000 dol. per annum. The imports being ten millions and the exports five millions.

Mr. Ward has studied seal cylinders from 4,000 B.C. to 400 A.D. of Babylonia. The Vital Statistics Department of the census bureau shows the benefits of Antitoxin, and other treatment, in the reduction of the death rate, as in croup from 27.06 to 9.8 per 100,000; in typhoid fever from 46 to 33; in brain diseases from 30 to 18; in bronchitis from 74 to 48; in cholera-infantum from 79 to 47; in whooping cough from 15 to 12; in malarial fever from 19 to 8; in convulsions from 56 to 33; in scarlet fever from 13 to 11.

The tribes in Terra Del Fuego are the Onas, Yaghans, and the Alacalufs. These are all decreasing in numbers.

The Home Office in dealing with professional criminals, proposes to lock them up for many years to stop crime.

In an article on the "Curse of the Corset," it says the woman's waist is naturally two inches larger than the man's for those persons of the same height.

The Chinese love Jade, and think it is the most precious of all ornaments.

The revelations of radium, in the *Edinburgh Review*, says bars of lead and gold placed together, the gold will penetrate the lead.

In the *Gentleman's Magazine* it says the Irish is a composite people beginning with the Iranian or Persian



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migration in the most remote period of Irish history, and continuing through the admixtures of the Basques, Celts, and Norse, to the entry of the Scotch and English. The Firbolgs were fire worshippers of Eastern origin, and they inhabited Ireland at the time of the coming of the first Christian missionaries. The feast of Beltane was on May Day, when they lighted the sacred fire on Tara, it was the Baal fire, and the only one alight on the first day of May.

The Sidh, pronounced Shee, afterwards were called Fairies. They were from the Tuatha De Danann, a very ancient race who preceded the Milesians.

The researches continue about the Forum of ancient Rome. They have been examining the tomb of Romulus under the black stone pavement. There is an inscription on a pillar near it in the alphabetic characters of the Greek letters in the Chalcidian Colonies in Italy, which were the sources of the Roman and the Etruscan writings; they were in the Boustrophedon manner, from right to left and then left to right. This inscription was one of the three oldest Latin writings known. Many other important archaeological discoveries are being made there in the excavations.

Dr. Haigh has been writing upon his researches in uric acid and anther, and their removal by proper dietetics.

The late Count Pierrecourt, to the city of Ronen has left two million dollars, to form a fund to pay twenty thousand dollars each year to four gigantic couples of men and women, the largest people in the world, who are to marry and produce a race of giants. There are now secured Lewis Wilkins, 9 feet high, Ella Ewing, a Missouri woman, 8 feet 7½ inches high, Ali Hassan, a Turkish giant, 8 feet 2½ inches high, and Arthur Beupre, 7 feet 11½ inches high, so the *World's News* states.

Mr. Longley is 57 years of age, he weighs 44 stone 5 lbs., is 6 feet one inch high, is 70 inches round the chest, 83 inches round the waist, and 23 inches round the calf of the leg. He is the landlord of the Star Inn, at Dover, in England. These sizes should interest anthropologists.

We have to acknowledge the receipt of the *Australian Medical Gazette*, which contains a discussion upon preservatives in foods, plague

precautions in Sydney, the open air treatment of tuberculosis in New Zealand.

Dr. Szombathy has made excavations in the cemetery at Hallstatt and in the tumuli at Gemeinlebarn, and at Langenlebarn, and in a cemetery at India and studying the finds in those and other places in Austria.

Julius Tensch writes on later Neolithic settlements with painted pottery discovered in the valley of the Alt (or Aluta), in the neighborhood of Koonstadt in Transylvania. They found stamps made of burnt clay with spiral devices on them (perhaps for marking their skin instead of tattooing), also fragments of pottery decorated with spirals of white slip on a polished red ground bordered with black lines. Spoons and ladles were abundant, they had engraved and other patterns on them. Human and animal figures of burnt clay were found there with bones of beavers, bears, foxes, wolves, lynx, chamois, wild cat and stags and oxen, with domestic dogs and pigs.

Dr. Moriz Hoernes in his book on diluvial man in Central Europe describes the finding of a dwelling place of the Neolithic age near Troppau, in Silesia in Austria there they found a stone axe made out of half a perforated axe which had split along the perforation. Another axe found there showed the marks of a saw by which it was shaped.

Dr. Bensley, of Toronto University, has been writing upon the Australian marsupials. He finds the bandicoots unlike other marsupials possess vestiges of a placenta; he finds that it is the general belief that all modern marsupials with the exception of the Tasmanian wolf or thylacine are derived from a primitive arboreal type of which the South American opossums are now the only representatives. The tree kangaroos show a reversion to the original type. The opossums are the most primitive of living marsupials, and they date back to the eocene (tertiary) times. The Australian marsupials must have either come from Malaysia or through an antarctic connection. The fossil marsupials are of interest.

Professor Sergi has been studying the antiquities found of the primitive Romans time, many being very interesting.

In the *Century Magazine* is an article on "Current Misconceptions in Natural History," in which the author

says that animals do not accumulate a store of knowledge, as that is impossible without language, as man began to emerge from the lower animals after he had invented language. The lower animals do not think, as they have no words with which to think; but the animals are curious, and show their curiosity in many ways, and Darwin speaks of a baboon that examined the paws of a cat that had scratched it, and then deliberately bit off its claws. Animals when studied show instinct, imitation, and experience, as also do men and children imitate their parents. A rabbit that was confined with a monkey, imitated many of the monkey's ways. Dogs living with cats learn to lick their paws and then thus clean their faces, ears, &c.; and wolves reared with dogs learn to bark. Dogs draw up their faces when they see their masters laugh. A cat which had been taught to sit up for food, was imitated by her kittens. Birds and beasts vary constantly, and in long times, produce new species. The dog, the elephant and the monkey show gleams of reason. Animals' lives revolve round their wants, as food, safety, and offsprings. An animal: As a beaver makes its dam, a bird its nest, and a spider its web, as well the first time as ever afterwards; but a man could not chip a flint the first time he tried into an axe, he has to learn by practice. Domestic animals make mistakes in eating eating poisonous food, as sheep laurel, or St. John's wort, wild animals know better.

How to live long has been written on by Dr. Tracy. He says imperfect metabolism leads to the retention of waste products in the blood, and if they are deposited in the walls of the blood vessels they involve the decay of the individual. A sudden shock causing the heart to intermit its beats, and if it leaves the brain for five seconds without fresh blood a fit is produced. Too much food or drink leads to the clogging of the system. Excess in food or drink will shorten life. Sometimes, as after a bilious attack, a man feels better fasting than when feeding. Cornaro spoke of the delight of his frugal meals. He made the yolk of an egg suffice for a meal, and sometimes for two meals. Moderation has more to do with long life than anything else. Moderate sleep, and exercise, with cleanliness, will prolong life.



**The Mingling of Races in Australasia.**

AUSTRALASIA includes within its boundaries portions of Melanesia, Malaysia, Polynesia and Micronesia, and in these places many races have met and mingled, so that large numbers of people there are of very diverse types, even among the fairer Polynesians and the darker Melanesians. A study of these islanders show that the original inhabitants were Negritos and Papuans, and after them came different tribes of Dravidians. These were followed by the peoples who are named Bisayans, Tangeloks, Lolos, from the Philippines, who were followed by Malays from Asonesia. Then came voyagers from the Japan islands into Micronesia, and the Moluccas, with Wagi, Mang Kasas and others, all these sending parties drifting through the Solomons, Fijis, New Guinea and to the more easterly island and to Australia. Some of these passing along to northern side of New Guinea reached the Samoan isles, while others sailing along the southern side of New Guinea arrived in the Tongan islands. From these named groups they in after times passed from them to the Sandwich, the Marquesan, the Society and the Low Archipelago, and to Easter Island. An intercourse by double canoes sailing to and from the Navigators, the Friendly, the Society, New Zealand, the Chathams and other groups of islands. The great sailing double canoes carried large companies for thousands of miles, from island to island before the earliest Europeans were in the Pacific. When the great war canoes reached the different islands their warriors killed the men they found there and kept the women. The lighter coloured Polynesians were more skillful and enterprising than the Melanesians, and these lighter coloured people took with them to each group they visited seeds, roots, etc., of the plants they cultivated for food, and which they gave to the darker islanders and taught them how to grow and cultivate these things. They may thus be traced in their wanderings from the times when they started from their earlier homes along the *Ara-watti*, river banks in Burmah, until they reached what is now Pegu, but which they called *Hawa*, which in their traditions is regarded as the Great *Hawa*, while their subsequent stopping places they spoke of as *Hawa-iki* (or little *Hawas*, *Hawa*

being separated-broken). *Ara-whata* means a bridge or ladder, a path, or way, etc., meaning where they broke their journey or separated, as *Ara-whata* was the bridge, or way, where they were united, in Burmah, from where they originally departed and passed from island to island until they reached the north and the S.E. shores of New Guinea, and from there going to Fiji, Tonga, or Samoa, Tahiti Rai-Atea, some remaining in each of these and other islands, while many returned. With this long continued mingling of voyagers many races and hybrids are represented in the different groups and islands, all using dialects of what has been called "the great Polynesian speech," although in those islands where the blacks are most numerous the dialects are least like the more perfect Polynesian tongue. In the Solomons, and in New Guinea, the Negritos, Papuans and Dravidians have overmastered the fair Polynesians. In Fiji the natives show more of the Polynesian elements in speech, costumes, etc. In Tonga and Samoa they are more Polynesian in appearance, although their dialects vary, their costumes, culture, etc., exhibit differences from more and less Fijian black tribes. In Micronesia the original black natives have received Polynesian intermarriages and also immigrants from the Japanese, and on their islands are structures of Megalithic formations which have been described by Mr. Christian and other visitors who have studied the erections, dialects and the traditions; other erections on these islands would well repay careful studies. On Tonga is a great trilithon and the mounded tombs of the early Polynesian kings, but the traditions have not been fully collected, studied and translated. On Samoa is a stone house and other ruins that yet remain to be thoroughly described. In Tahiti were terraced pyramidal temples like those of Central America, and the people wore Pouches and were in several ways like certain American tribes. On Easter Islands were hundreds of platforms and statues resembling Central American works and also hieroglyphic inscriptions cut upon American plans and ideas, the original inhabitants called Long-ears by the later or present Polynesian inhabitants. On Oparo, in the Low Archipelago, are fortresses on terraced hills like those found in Peru and Central America; before the conquests of Columbus,

Cortes and others the American voyagers over the Pacific and to its islands were numerous, although they ceased after the Spanish conquests. The Polynesians of themselves, and without foreign teachings built no stone structures nor made any hieroglyphic or other writings. Where such things are found they are from foreign introductions, but the traditions and the genealogies were very numerous and widely remembered and recited by the chiefs. The Marquesans recited the legends of their voyages from their original home, and the places they stopped at in their voyages and migrations, until they reached and settled in the Marquesas. The Sandwich Island legends, etc., as published by Fornander and others, gave many particulars of their migrations and genealogies in former times. The Tongan, Samoan, Tahitian and New Zealand also give important particulars. The few Fijian traditions that have been collected and published give information upon their immigration into the Fiji Islands, but the old poetry and legends will give much more if it is ever collected and made known. In the Chatham Islands there are carvings and paintings on the rocks which should be photographed before they are lost, as they are the relics of a long lost people, recorded in the genealogies which go back further than most other Polynesians. The gods of all the Polynesians were their deified chiefs, afterwards made more supernatural by the priests and poets for their own purposes. Rangi, Tangaloa, Tane are represented by their descendants still in Tonga, Samoa, Fiji, Tahiti and Rai-Atea and other islands. The Malays both by land and sea advanced from Sumatra, where in the district of Menangkabau they came into existence by the joining of four tribes, among which were the Mallai of India, sending out colonies into the peninsula of Malacca and into Java, from thence spread into other islands and as far east as the shores of Torres Straits, where they in their annual voyages obtained trepang, pearl shell and other articles for their trade. These, intermarrying with the women in the islands, left some of their mixed descendants from New Guinea to Java or Borneo, with various arts and cultures left on the islands. The Arabs have traded to Sumatra, Java, Borneo and to the Moluccas, from



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pre-historic times, and after their conversion to Mahomedism they carried this religion to the Eastern Archipelago and taught it to the Malays and other peoples there with certain of their words and other things. Long before the Christian era the Moluccas were trading with Arab and other voyagers for spices and other of their own produce, and they had a history of their own country and its different islands written in the characters and language of their own. This shows that about 500 A.D. a colony from the Moluccas went and settled in Java for trading, etc., thus increasing Moluccan influence, which increased until the kings of Ternate and Tidore indulged in civil wars, but also planted colonies along northern and southern New Guinea coasts to obtain articles for their trading and sale with China and other lands. Several ancient legends affirmed that in the island of Ceram "The Fountain of Life and Youth" was situated, and the Chinese Government sent out an expedition to discover and test this health-giving spring of water, and after three years they returned without obtaining what they required. But the Arabs continued to believe it was there, but hidden by volcanic disturbances. The legend of this health-giving water was believed in by the Polynesians, who called it Wai-ora, water of health, and "the life-given water of Tane" and by other similar names. On the Celebes are several distinct peoples, and on Gi-lolo were formerly some of the Lolos from Northern China. Some fancied that the Polynesian speech was a dialect of the Malay. This is not so, as the Polynesians were in the Moluccas before the Malays went there. The Polynesian is a lingua-franca, which received its forms from a mingling of speeches fashioned to be easily spoken by peoples with diverse speeches, who met for trading and had thus to speak to each other in the easiest acquired manner. In the Melanesian Islands the natives dialects are more consonant and nasal than the Polynesians, who prefer vowels in their words. The plan of departed spirits of dead men in Fiji is named MBuluta; in Tonga it is Polutu, believed to lie to the westward by both people. Rangī is the heaven of some Polynesians, and Langi and Lani of others. Some say Ra and others La for the sun. Some say Tane, others Kane for their deified chief, and Tang-

loa becomes Tanga-roa, and Kane-loa and Tangata man becomes Kanaka man. Fiti in Tonga is Viti in Fiji and Whiti in other dialects, all depending upon crossings with those from other races. But the genealogies from the most distant islands contain similar names before the separations into their different islands.

#### Palaeoliths in Tasmania and Australia.

ANTHROPOLOGISTS have properly placed a great value upon the finding of chipped as distinguished from those implements made by grinding, as they indicated ages of progress among mankind, and also various races of men. The palaeolithic implements were the older forms, and were made by the most primitive kind of men and their descendants. The Neolithic were the later types, being those that were made by the more advanced kinds of men. But here it must be observed that some of the men who made types of implements similar to the palaeolithic forms, survived to the later ages in cases where they were separated or isolated by wide spaces of water, or other obstructions from the men who made neolithic implements by grinding them. Now, in Australia, at the present time, there are some tribes who make palaeolithic forms of weapons, &c., and others who make the neolithic forms. The more ancient races of men in Tasmania made palaeolithic forms of chipped implements, and the later Australian blacks made ground neolithic forms of utensils. This difference is accounted for and explained by the Tasmanians being separated by the waters of Bass's Straits from the Australians after the more primitive races of men had reached Tasmania, but Australia was connected by dry land with New Guinea and the Eastern Archipelago, until after the tribes of Neolithic culture with ground implements had arrived there, and had taught how to produce the axes by grinding to the earlier tribes there, who made the chipped stone forms.

But chipped implements are not all of one kind or form, but there are known at least four distinct forms which have been recognised as marking different types and periods. First, the oldest type of palaeoliths are of A Cheeluan form. The second, of next oldest, is the Mousterian form. The third oldest is the Solutrian. The

fourth is the Madelanian. All these four are of the Quaternary or Pleistocene times; but of recent times from fresh discoveries it has been found necessary to recognise another kind of flints older than all the preceding which are called eolithic. These were made in the Tertiary period; they are much ruder and more uncouth shapes than the palaeoliths. Some forms of palaeoliths have been found in Tasmania and in Australia, and these indicate the descendants of the primitive men who made these things of the above-named forms. Miss G. King, at considerable trouble and expense, has had specimens collected of these Tasmanian and Australian palaeoliths, and also for comparison neoliths from the ancient kitchen-midden and other places in these countries, and has placed these in cases she has made to preserve them, and these she has placed in the care of Dr. Carroll, that he may exhibit them to those who are interested in these subjects. As the advances of settlement in these lands will destroy these ancient palaeoliths or prevent them being preserved until future times, it is advisable that all possible of them should be found and preserved for the students of ethnology and technology in future times. It is proposed to take photographs of these discovered that there may be distributed and preserved historical copies of these implements, and blocks of these for printing in "Science of Man," and sent to all the learned societies in Europe and America with which our Royal Anthropological Society of Australasia corresponds that they may be placed in their libraries for those who are working in these matters. We are endeavouring to obtain Crania of the Negritos and the Papuans in these lands in ancient times, some of whom will have been the makers of the palaeoliths found there before the Neolithic tribes came there. The Fauna and Flora of Australia shows that it has not been joined to Asia by dry lands since Jurassac and Liasic ages, but that in the Eocene some of the marsupials were developing and passing on their way to Australasia; those first developing from them after they reached Australia lived in trees as the so-called opossums, wombats and others, all being nonplacentals. Those that reached Tasmania developed into those whose present descendants are popularly known as the Tasmanian tigers, wolves, &c. Those



now extinct in Australia being some carnivorous and others herbivorous animals, their extinction in eocene, miocene and pliocene times being brought about by unfavourable climates, elevations and depression of land, and some time later by palaeolithic and neolithic men; the dingo or hunting dog of these latter men, having destroyed these in Australia, while those in Tasmania survived, as the neolithic men and their hunting dog never got there, Bass Straits then formed by depressions and submergences being in existence. All Australasia is an area of very frequent elevations and submergences, as the coal measures prove for long past times by the successive layers of shale, coal and sandstone, that are found to have followed each other in the risings, sinkings and growths of vegetation now coal, and since then the raised coral reefs and the gradual sinkings as fresh coral was found. Where the earliest marsupials came from is not yet finally settled; it may have been from America over former dry land connections, as the opossum still remains in America; but the birds and reptiles appear to have come by way of the Eastern Archipelago, with the opportunities of the dry land connections since submerged. The Negritos of the Andamans and the Philippines may have come to Australia over such lands, and the Papuans also, and may have come over water spaces by help of rafts and by swimming. Having reached Australia, these two races passed into Tasmania before the Neolithic hunters arrived in Australia, who never went into Tasmania. The first men in Australia did not make canoes until they learned to do so from other natives.

When the first men came into Australia they brought with them various types of chipped stones of the forms

found in other lands. They were made for scraping skins, for opening shell fish, for using as knives, as hammers and as axes and celts. Some were chipped on one side only, others on both sides, some with sharp edge, some obtuse, some acute, some acuminate, some worn with use, others not, some discoloured from age, others less so. Among the Neolithic axes some were light weights, others heavy. There were less axes found among the oldest finds than in Australia where they were more formidable and much more numerous, as though there was less fighting in Tasmania in the olden times than there was among the ancient tribes in Australia. The first Europeans, after they had visited the Tasmanians, pronounced them to be a peaceful and non-aggressive people, which was only afterwards changed by bad treatment and ill-usage of the whites, who treated them in a very severe manner. The Tasmanians do not appear to have used the boomerang or the throwing stick for spears—these seem to have been introduced by the Australian tribes with other hunting weapons. The quaternary implements in Tasmania and in Australia, although very much like those of Europe, are not found with the bones of mammoths, rhinoceros or cave bears, because those characteristic quadrupeds were never in Australasia, they were only contemporary with the great marsupials of Australia. The oldest Australian implements are like those of Europe, the rudest being roughly chipped celts with a few flakes struck off at the smaller end, or

flakes sharp at one edge to be used as knives or pointed piercers, to open shell fish with; but no arrow or spear points are found among the oldest stones in quaternary gravel, and only in neolithic age deposits.

The palaeolithic celts of Australia are like those found in India, Africa or Algeria and Natal, in their chipping and forms. Some authors have pointed out many resemblances between the dolichocephalic Neanderthal race of European quaternary times, and the Australian blacks in some of the tribes; and the chipped implements were alike in these two races. As one of the racial elements of the Australians was the negrito, who made smaller palaeolithic implements than other races, as they were for the use of people from 12 to 18 inches less than Europeans, it is not surprising that these smaller implements are found in Australia. Some of the palaeolithic implements of Australia are very like those of the Miocene and pliocene men's of Europe, especially the scrapers found in France and Kent, England, or the Thenay scrapers, borers and knives of the Miocene age. In some of these old implements the chipping is so rude that it shows the very beginning of the art of working these stones, and some show that they picked up stones which would give them least trouble to chip into points and edges that would make them useful.



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## Aboriginal Place Names.

The Society is indebted to Mr. Licensed Surveyor, R. B. Mackenzie, of Dubbo, for this information.

ABORIGINAL.	ENGLISH.	MEANING.
Bulgandramine	Bulgandramine	Bulgan, boomerang. Dirra, hand. Mine, blackfellow.
Moongery	Mungery	Red or black sticky clay.
Wullungbullang	Wall-n Billan	A thick head, a dance, a dolt.
Womboingalah	Wambangalang	The grey kangaroo in great numbers.
Doolanghooterghu	The Springs	A blackfellow getting in a Huster when feeling his way across a shaking bog with his spear and the spear disappearing.
Dundullamahl	Dundulimal	A terrific hail storm.
Nunnamah	Nanima	Rough stony country.
Cumbooglecaban	Cumbooglecumbong	Cumboogie, a kind of manna or gum tree leaves. Caban, plenty, a lot.
Birriebungie	Birriebongie	The cormorant or shag.
Tubbo	Dubbo	The skin of the breast of an eagle hawk, the feathers plucked off, and the down left on, and made into a skull cap. It applies to any covering for the head.
Micketty De Mu'ga	The Holmes	A place of much lightning and thunder. Tree struck by lightning.
Calowablah	The Turtle Mount or Fothills Mount	A high mountain of rock called after the shingle back lizard.
Wunda Wundah	Wandoo Wandong or Wandanan-dong	Devil devil.
Yummarjuyly	Emmajuly	A dead currajong tree, or "see there is a dead currajong tree."
Derangarbi or Terrangarbi	Redbank	A very high red bank on the Little River, a few miles above Arthurville.
Wullungbogalah	Terra Bella	A heap of rocks near Tarrabella homestead, on the Macquarrie River.
Goondhi	Gundy (now Arthurville)	The stringy bark tree.
Wilbootree	Wilbetree	A good long snipe's switch.
Deeran Goomar	The Meadows	De ran, a mountain, and goomar a plant that bears a fruit in shape to a pineapple.
Dhirrangbunganmine	Terramungamine	Dhirrang, high. Bungan broken. Mine, blackfellow. A blackfellow with a broken thigh.
Gillawurna	Gillawarna	Named after the galah parrot.
Ghirralangbone	Girrlambone	A place of many stars.
Goonalgang	Ganalang	A great place for female opossums.
Nulloindheran	Ellengeran	Nulloin, a pebble, dheran, eating (pretty white small pebbles and a blackfellow eating them).
Killendoon	Gillendoon	Turning anything in a mob, such as a big mob of blacks being turned by their King.
Beelah Ingar	Belleringah	Beelah, a creek or small river. Ingar, crayfish.
Tahmiengooli	Tomingley	A piece of bark like a death adder. "Look out, there is a death adder."
Gooleegambil	Gullingambel	Meaning unknown.
Kidgeebahgamil	Cudgeebingambil	Wild currant bush.
Doolah Doolahderry	Dilladerry	A place of many logs. "Oh see what a lot of logs there are here."
Coonabooloo	Canoblas	Coona, one shoulder. Boooloo, two shoulders. (The Canoblas near Orange has two main peaks or spurs).
Moolah	Mullah	Matter, corruption or pus.
Wurren or Wurrena	Warren	A large root of anything, or a blackfellow's penis.
Timbrebongan	Timbrebonny	Broken breast bone of an emu.
Narroomine	Narr mine	Narree, honey. Mine, blackfellow.
Mumbobone	Mumblebone	A great number of beetwood trees, or "see what a lot of Mumbo trees there are."
Mooriantone	Marianbone or Merriyanbone	A great place for cockatoos, or "Look what a lot of cockatoos there are over there."
Buddharbone or Butharbone	Butterbone or Buttabone	A large quantity of Buddah trees.
Marebone	Marebone	A place of high strong winds.
Quilbone	Quilbone	A number of quail.
Gillahgambone	Gullargambone	A number of galah parrots.
Youngy	Youngee	Brush or scrub turkey, a speckled brown.
Euchie	Euchie	Native dog.
Dugga	Dugga	Bog.
Gerar	Gerar	Wind.
Wamboin	Wamboin	Red kangaroo, black or dark.
Borabung	Bourbah	Place where young men are made according to Aboriginal custom.
Inglegh	ingegar	Place of the sick.
Narrubone	Mount Forster	Bees nest.
Euroka	Euroka	The sun.
Derri Derri	Devvy Devvy	Willy Wagtail.
Mungyor		A tree growing on swamps or creek banks.
Goonamble	Coonamble	Bullock's dung.
Coolibah		Stunted box.



ABORIGINAL.	ENGLISH.	MEANING.
Multhonbone		Place of eagle hawk.
Colane		Colane tree.
Mullandebemurra		Eagle hawk's dung.
Bunglebung		Balla.
Umungla	Emungla	Waterhole near Warren Show Ground.
Bova		Calf.
Murramboin	Murrawombie	Forest kangaroo.
Ingha		Cray fish.
Wanda Wondong		Devil devil.
Booga Booga	Booka Booka	Stink stink.
Willie		O'possum.
Buckynguy		Stinking hole.
Woorowooranay		Crooked creek.
Goobarbone		Plenty fish.
Kiamurran	Kiameron	Spade on hand.
Billa Bulla		Double river.
Buthabone	Bultabone	Place of Budtha tree.
Merri Merri		Dingoes.
Meriabone		Place of Dingoes.
Comintar	Cannonba	Jam.
Gillendoon	Gillendoon	Piss hole.
Mumbobone	Mumblebone	Place of beetwood trees.
Collie		Water.
Bebruebeundah		Mount Harris, Macquarie River.
Begenbah		Dumpat Brigalows.
Burramagga		Whirlwind.
Drungalear		Brown snake.
Weogolah	Weegerah	Stopping place.
Yabberbung	Yabberba	Carpet snake.

## Aboriginal Place Names.

Continued.

The Society is indebted to Mr. Jas. Anderson and Mr. H. French, of Mullumbimby, for the following information:—

Cumbulam. Flathead fish  
Moneal-Moneal. Oyster  
Uralba. Quartz stone. Home between the hills  
Tevan. Stinging tree  
Balloon. A river  
Balloona. Wellknown town, Ballina  
Place of dead, dying or wounded; blood running from wounded  
Na. To see  
Tumcot. The sea, the Ocean  
Currenba. That portion of Byron Bay near the point, on account of the water channels or "Curaby."  
Curaby. A gully  
Belongil. Because of the inlet from the sea  
Burrogoorro. The sea beach  
Durumbil. The round hill inside Brunswick Heads  
Targourah. A stopping place or camping ground

Nubboy. Lawyer-cane  
Nubhoogum. Dense Lawyer scrub  
Meoloobinby. A name given a small ridge (Doran's Hill)  
Moyoncum.  
Thuncogin. A prominent part of a mountain running north  
Cogin. The the north pole  
Deleanberry. West wind, Worrying  
Worrying Cold  
Montecollum. A sciece of black felspar  
Curral. The back or loins  
Billenargil. Middle ground between the sea and a lake  
Thulgan. Lightning, electricity  
Moograh. Thunder  
Coochong. Rain  
Dunbibil. A creek at the foot of a high mountain  
Gununggang. Dysentry, or purging  
Burrungbah. An implement of war, 7  
Cooyoungungil. The stars  
Coonturimbah. Now Gundurimbah  
Tookerimbah. Gerrard Hill  
Munnuregan. Now South Wood-burn  
Buckanahun. Buckan, is broad; thun, penis  
Tattham. Baby or child  
Nooram. Sleep  
Whyan Whyan. Patch of grass enclosed by scrub

Cowlong. A patch of grass enclosed by scrub  
Figh-high. The bloodwood tree; an iguana  
Murrawillumbah. Called Marwillumbah  
Tumbulgum. Called Tumbulgum  
Woolloombin. Large  
Thabbo. Small, a boy  
Yargery. A girl  
Woolbong. Young woman  
Bullengen. Handsome  
Dowcan. Land, or to walk  
Cubery. Hunger  
Gennarabah. A name on the northern arm of the Brunswick River  
Bumingum. A name on the south arm of Brunswick River  
Cudgen. Red  
Coommerah. Blood  
Nunden-Nunden. A name  
Murraquin. Young man  
Kithyooni. Old man

The Society is indebted to the Under Secretary for Lands and the officers, Messrs. O. Herborne, C. Pennefather and K. J. Allen, of his department for the following information.

Yamravel. Myrtle tree

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- Clybucca. A crooked tallow wood tree  
Dondingalong. Apple tree  
Burayangatti, Burragunbutti. Dead stinging tree  
Tunaban, Tantan. Kurrajong tree  
Wiloba, Job's Mountain. Red cedar trees  
Bulgong. Wild orange trees  
Mopawabah. Native forest cherry  
Currunghi, Burnt Bridge Creek. The bark shed from gum trees  
Yurrola, Yessotah. Gum tree  
Merrewaba, Merrewa. A class of brush-wood  
Munga Munga, Mungay. The white ants nest when built in the ground  
Eragorara, Commandant Hill. The white ant; also a camp which a native has just left  
Bunda Bunda, Banda Banda. Split, or broken open. There is a precipice of about 800 ft. near the top of Mount Banda Banda. Properly, seaward, 4,050 ft. by aneroid  
Bungo-baine, Sherwood. The lighting of a flying squirrel on a tree  
Murrawin (Mt.). The ordinary brush turkey  
Tullingihii, Double Head. The highest in the locality  
Durrumbi, Turrumbi. A stake  
Kullateeneee, Kullatine or Kallateene. A place, the grass on which is frequently burned  
Euroca, Euroka. The sun  
Yarrabandinni. A lobster  
Gimunga, Fredrickton. A kangaroo rat  
Billunbopini. { A lawyer vine.  
Billin  
Pini. A vine laying down  
Minacrobini, Arakoon. A place where pelicans are plucked  
Yarrihapini, Yarrhapini. The rolling of a bear down a hill, or the rolling of a bear's head down a hill  
Comara. The senior  
Milling, Miln. Very wet  
Dunga, Dungay. Iguana  
Gunderine, Onderway. A male paddy melon  
Carri. Quartz gravel  
Burrubury, Smith's Creek. The horse or march fly  
Temagog. A wasp  
Warbroon, Wabro. When natives start on a journey and return before completing the intended journey, or are compelled to divert from the intended route. The furthest point they got to on the intended route is called warbroon  
Bicotan, Willi Willi. Wide, or open. The willi willi country is more open than that immediately surrounding it  
Wilcan, Seven Oaks. An opening which the flood water goes through. The flood water breaks over at Seven Oaks, and runs into Clybucca Crk.  
Bucking, Kempsey. A place where anything is cooked  
Tuckarimba. Lismore  
Bowyam. Casino Bridge  
Cobaiwe. Tunstall Gap  
Thorem. Tunstall Hotel  
Koogal. Disputed plains  
Kooumba. Norton's Gap  
Woombi. Bentley Station  
Donigum. Hanging Rock Creek  
Boorgum. Harrison's Farm  
Mungra. Gum tree  
Bi-be. Apple tree  
Bigeri. Ironbark  
Bonon. Bloodwood  
Weiagal. Oak  
Gibberree. Mahogany  
Budgan. Silky oak  
Nouri. Stringy bark  
Moca Mockim. Tulip  
Tyne. Myrtle  
Booyong. Scrub wood  
Booya. Fig tree  
Goorong. Pine tree  
Ti-gel. Red cedar  
Wooza. White cedar  
Quigan. Opossum  
Coombyne. Flying squirrel  
No-maal. Iguana  
Gur-ong. Flying fox  
Bograbe. Native bear  
Coo-bul. Carpet snake  
Goonbi. Black snake  
Toogan. Bandy bandy snake  
Heeran. Green snake  
Koogun. Laughing jackass  
Mumogun. Green pigeon  
Wo-billan. Wonga pigeon  
Tungun. Lightning  
Moogra. Thunder  
Goo-ong. Rain  
Boo-ban. Flood  
Yelgan. Sun  
Yarraman Euraman. Horse  
Bullong. Cow, bullock  
Woo-gan. Crow  
Minore. Corruption of "Minawa." Where?  
Narrannine. Honeyman  
Willydah. Willy, opossum; dah, place of  
Momo. A stone  
Eenerweena. Little woman  
Bulgandramine. Man on a mountain  
Bugabadah. Stinking budtha tree  
Buddabadah. Two budtha trees  
Belaringah. Crawfish in belah trees  
Ingar. Crawfish  
Gunningbah. A blind frost  
Buttabone (Budthaboned). A place of budtha trees  
Mumblebone. A place of mumble trees  
Genanagay. Clear out  
Wallenbillan. Rain in a cowl  
Terramungamine. A broken legged man  
Goonoo. A blind or one-eyed man  
Beelban. After the animal of same name  
Galargumbone. Place where galahs lay  
Murrungundie. Corruption of Moora Milldegindinduy nose and eyes at play (laughing)  
Cobranaraguy. A band round the head  
Wirrigi. A head band  
Barbigal. Big frost  
Dungary. From Dungar, a mussel or shell  
Burrabadeen. Burra make haste  
Wanaawandong. Devil-devil  
Derribong. Old man.  
Eringanerong. From Eringanerong, a wood duck  
Mumal. A hole  
Bourbah. Name of a giu  
Cullemurrawang. Swift running water  
Drungalear. Black snake  
Cumboogle-cumbong. Sweet food  
Dulwarrina. To stand and read  
Gundie. A hut—over there—far away  
Yarra. Gum tree  
Colane. Name of a tree  
Narran. A scrub  
Woringerong. From Derongerong, a storm bird  
Bullagreen. Bulla two  
Bulla-bulla. Twice two (four)  
Ellingerah. Gerah wind, colleen probably water (water and wind)  
Bungiebombah. Bungie to break; bombah to hit



## A few Notes on Australian Aborigines.

(By JOHN F. MANN.)

WE reprint the following interesting reminiscences of Mr. J. F. Mann from the Sydney "Daily Telegraph" of March 31. Mr. Mann was a member of one of Leichhardt's expeditions, and has had exceptional opportunities for observing the natives:—

During a long residence in this country I have had many opportunities for meeting and interviewing these people, and I learnt to respect them. No one laments more than I do the neglectful treatment they have been subjected to; few individuals, comparatively speaking, have studied with care their nature and habits.

From the first they were looked upon as a dirty, useless race of beings professing no form of religion, having no fixed abode, but living in the open air; not cultivating the soil; existing solely by hunting and fishing; having no words to express numbers above four or five, for which they made use of their fingers; these and a variety of other failings at once placed them, according to historians and travellers, on the lowest grade of humanity. Serious as these omissions are supposed to be in the eyes of many, the aborigines evince kind traits of character, when opportunity offers, not surpassed by their more civilised brethren. As they are now rapidly disappearing, I think it well to offer a few remarks in their favor as obtained by personal observation.

Being desirous of securing some knowledge of bush lore previous to venturing on an exploring expedition into the interior, I was fortunate enough to fall in with a most intelligent blackfellow, "Long Dick" by name, who gave me much valuable information. His advice in general was "not to ask too many questions, 'cos blackfellow tell plenty lie," but to keep quiet, sit still, and watch proceedings."

I noticed that the arrangements of a camp were carried out in the most systematic and orderly manner. The old people occupied the centre of the assemblage, and each man, his wife and family, at stated distances around. In the morning they start away to follow their several avocations, and return towards the evening with the result of their chase or donations from the settlers. On approaching the camp

they slacken their pace, and settle down noiselessly at their respective stations: silence is observed for a time, but this soon vanishes, and conversation becomes general. The women unpack their heavy loads or game bags, which in addition to their worldly goods, may possibly include a baby, or a litter of puppy dogs, or both. The game, whatever it may be, is liberally divided or exchanged; thus following an ancient custom, the details of which are too long and complicated for explanation here.

After enjoying their evening's repast, the men by degrees, one by one, silently assemble around the old men, talk over the affairs of the day, and proposed arrangements for the morrow. The younger women in like manner collect around the elder, here they chatter away, discuss and talk scandal of every description. In either case the most trivial matters are referred to. The young men employ much of their time in making spears, boomerangs, or other implements; the women in making fishing lines, nets, etc.

The advice I received as to behaviour on meeting strange blackfellows was "to sit down with a branch in my hand. Don't attempt to enter a camp before being invited to do so. If friendly disposed, a fire stick will be placed in front of you, and you will be offered something to eat," conversation then commences.

Severe fights occasionally take place between neighboring tribes; these combats are not attended with such fatal results as might be supposed. These are mostly the result of drunken rows. Jealousy is a great factor in these disputes. The betrothal of a young female to her legal and future husband is regulated by certain very complex laws; the young lady, having a will of her own as she grows up, may possibly prefer choosing such an important article of domestic happiness herself, rather than be a slave to the legal suitor, who may possibly be objectionable in many ways. But the law has to be enforced. The only way out of the difficulty is for her to "bolt" with the favored one, who has already probably arranged matters by means of a message stick, sent on the sly.

I once met an eloping couple, the woman on horseback; a rival suitor followed on the tracks a few hours

afterwards. On coming up with the runaways, the men had a desperate fight, but as no members of the tribe were present as witnesses, it was declared a "draw," and the disputants decided to bring the matter before the local bench of magistrates, charging each other with assault. It so happened that the rightful claimant was encamped within sight of the Court-house. He was now a decrepit old man, but appeared before the bench with the others. The presiding magistrate was somewhat puzzled how to act on this momentous question: Which of these three men do you like best? he asked the woman. "Me—like—'im—this fellow best," she replied, at the same time pulling the shirt-tail of the man she was eloping with. The old man, seeing that he had no chance of securing the fair hand of the lady, at once withdrew his legal or any claim. The lady then suggested that if the magistrate would bind her two other suitors over to keep the peace with each other for six months, she would fix up all other matters herself. This arrangement was carried out, but I never heard the result.

I could never detect the existence of any form of religion amongst them—that is to say, a belief in the existence of a Supreme Being. They firmly believe in a bad spirit, whom they call the "Devil-devil" (Booron). This imaginary spirit is held in dread by all, and bears a very bad character, sparing no one, old or young, who happen to come within his reach. He haunts lonely places during the day, and is everywhere at night, consequently they feel compelled to change their abode frequently and suddenly, in order to conceal their whereabouts, and so cause him trouble to find them. In addition to the annoyance caused by the devil, there are other reasons for shifting camp. The blacks are very improvident as regards food, and the supply of possums, bandicoots, and other animals and sources of food soon becomes scarce around a camp. Then, again, another troublesome item appears, namely, "plenty fleas, like 'im sand all about."

They firmly believe that the noise made by the rustling of the leaves of trees on a windy day is the sound of the many tongues of the devil. On one occasion, while talking to my black mentor, I thoughtlessly swung a bull-roarer, i.e., a small piece of flat



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wood, which was attached to a string, quickly round and round, when he became greatly excited, and, at his request, I desisted, as he declared he would get into trouble if continued, as it belonged to the devil "Booron." I afterwards thought to overcome his fears by means of a toy humming top, but failed. No one would go near it.

This superstitious belief is made great capital of by the wise men, or "koradgee," generally old men, in order to claim authority or the privilege to make use of the "roarer." The sound is often made by means of a long stick or wand.

One old man described minutely the appearance of the "Boongee" thus:—"Big head and eyes, long teeth, horns like a bullock growing from his shoulders, long claws from his hands and feet, etc.," evidently not a very fascinating individual. They met by accident in a scrubby gully, and at once engaged in a rough-and-tumble fight for a time, when the devil ran away, leaving his "bull-roarer" behind, which was at once secured by the old man, who made good use of it. On hearing a strange or imaginary noise, especially at night, a mandate is at once issued for the removal of the camp; no extra luggage is allowed, even small children and infants have to be left behind or got rid of by some means or other. How did your young brother get lame, I asked of Dick? "Mother bin throw 'im away one time; then we come along and hear 'im piccaniny cry; then look about and find 'im little fellow Keggy." The sight of a troop of blacks shifting quarters is a remarkable one, the men carrying their spears and boomerangs only, while the poor women are bent double under heavy loads.

Religious instruction made no impression on these people; this cannot be wondered at, considering the example set before them by their white companions.

The little fellow "Keggy," a most interesting, intelligent youth, who had attached himself to me, asked seriously, "Where that white fellow and woman what bin steal 'im peach?" As fruit was at the time ripe in the garden, I thought at first that someone had been robbing the place, but such was not the case, and the boy had some difficulty in explaining matters; till he further added, "Master bin hunt 'im along a fire-stick." I at last discovered that he referred to Adam and

Eve. He had been under the tuition of the Rev. Mr. Turekeld.

I undertook to teach this boy to read. He soon learnt the alphabet, but always hesitated at letter "y." I had to help him over it. Hesitating, as usual, at this lesson on one occasion, whilst I was engaged otherwise, I quickly uttered the letter "y-y" for him, when he suddenly jumped up and ran away. On his return a few days afterwards, he explained that "Wy-Wy," now "Woy Woy," is a signal of danger, and refers to the "Boongee," snakes, or any other danger, and means "take care," "look out," etc. The locality Wy-Wy was at that period infested by black snakes and death adders, so it was necessary to be careful. These people enjoy a joke, and, like their white friends, laugh heartily at it, so long as it is not levelled against any of them, when, however, they think that it has gone far enough, and that possibly some one or other of them is the objective. They, by imitating your tone of voice and gesture, at once "turn the tables" on you, and you feel glad enough to change the subject, for it is no joke being laughed at by a lot of blacks.

They are perfect mimics, and at once note any peculiarity of manner or action in any prominent resident, who receives a nick-name accordingly. Wild as these blacks are naturally, they yet display, as opportunity offers, traits of kindly feeling when approached by strangers in a quiet manner. Witness the devotion of Jacky Jacky to poor Kennedy; also the care bestowed on King, the sole survivor of Burke and Wills' expedition; many other instances could be noted. They are not a bloodthirsty set, such as are to be met with in New Guinea and other head-hunting, cannibal countries. In dealing or trading with these people they can be safely trusted to carry out their side of the bargain to the letter, and they naturally expect similar treatment from their employers; you must keep faith with them or they cannot be depended upon.

It was always the black boy who was sent to the post office or entrusted with any message of importance, perhaps many miles distant. The white man would sometimes lose all letters, get drunk, and stay away for days together. A blackfellow with a letter in a cleft stick would be permitted to pass with safety across the territory

of any hostile tribe, he would be respected as an ambassador and treated accordingly.

The supposition which prevails amongst many people that absolute death does not take place so long as the sun is above the horizon pervades or occupies the mind of the aboriginal.

Understanding that a small number of blacks, a remnant of the once powerful tribe who in the early days had caused so much trouble to the first explorers and settlers on the Murray River, were encamped a few miles from my tent, I rode out to visit them. The camp was a small one, only a few men and women, mostly invalids. I was especially interested in a young couple, a man and his wife. After a few visits I took a doctor to see them; he was a recent arrival from England, and was much struck by the extraordinary tenacity of life as exhibited by the sick.

The poor young woman, he said, had but a few days to live. It was a most touching scene to witness the care and attention bestowed by this man on his dying wife. Hesat by her side with a small branch in his hand, fanning her face and keeping the flies away, and for the few days I continued to visit the camp I found him in constant attendance. "Poor woman close up tangle down," he would say in reply to my inquiry, at the same time calling my attention to the position of the sun. At length the time arrived. The poor woman was lying partly on her left side, her right arm extended across her chest; while watching her helpless condition, she gave a low groan, turned on her back, her arm fell by her side, and the poor woman was dead. The last rays of the setting sun at the same time vanished behind the distant hills across the plain. "Me bin tell you like that," said the poor fellow, as he waved his arm in the direction of this sublime object; then uttering a loud exclamation, he hobbled away a few yards and sat on the ground, his face buried in his hands. The exclamation he had uttered at once attracted the attention of other members of the camp, their lamentations, especially of the women, were loud and mournful. Many of the women, in anticipation of this event, had already plastered their heads with pipe clay. The effect was weird in the extreme.



### The Origins and Domestications of the Fauna and Flora.

ANTHROPOLOGISTS must recognise the fact that between man and all the lower animals there is the continuous proof of the operation of the inventive faculty in the man, but not in the brutes; thus men are striving to overcome the troubles and difficulties which surround them, and to adapt themselves and the things they require to better possibilities of their diverse environments. But the advances they have accomplished have not been made by one race, or in one place only, but by many races and in various countries; therefore when, where and by whom the wild animals and plants were domesticated, becomes a very important study in the science of mankind, which may be advanced by discovering all concerning the taming, breeding, growing and feeding of animals and the cultivating of plants. It has become a very extensive as well as an interesting study to discover the times and places where and when the animals and plants were first domesticated by mankind. The horse, now so widely distributed over distant countries, was at its earliest known existence a dweller in North America, for their Professor Marsh has found the bones of its ancestors in the fossil beds of Nebraska; it was at first no bigger than a fox, and it had five toes on its feet, which by changes of various kinds as time passed became four, then three, later two, and at last one as at present, when it stands upon its middle toe in each foot and its other lost toes only exist in a rudimentary stage or occasionally appear as what farriers and horsemen call "splints," which they disapprove of. In the earlier portions of the glacial period, the horses had evolved to the size of ponies, and they passed from North America by dry land connections to Africa and Europe, and became very numerous. They were hunted and eaten by men who followed them from Africa over which Continent they had killed and eaten them, continuing to do so in Europe where in one of the camps these horse eaters left the bones of over 40,000 horses, showing how numerous the horses had there become. By the remains we may follow the horses and their hunters who let them across Europe into the Caucasus and to high Asia, in which part it is probable that the Turanians first

tamed and rode them as well as hunted and used as food the wild herds when the descendants of these Turanians passed into India. One of their most sacred sacrifices was that of the horse sacrifice, and horses were killed and buried or burned with their chiefs. But in the earliest known Egyptian times horses were not domesticated and used. But the Cannanites appear to have in very early prehistoric times used horses for their iron chariots in war and hunting, as did the Kelts in later times. In the earliest ages of the people who made the pile dwellings in the Swiss Lakes, which are believed to have been constructed and dwelt in over ten thousand years ago, they had then no domesticated animals, but only ate those they hunted and killed, but in later ages they had tamed and domesticated the sheep, the goat, the pig, the oxen and the dog; and these they killed and ate instead of the wild ones of these animals they previously had hunted in their wild state. The remains in the kitchen middens demonstrate these changes and circumstances. But although the earlier Egyptians had not tamed the horse or used it, they had tamed and used several kinds of dogs for hunting and also cats for catching birds as their ancient drawings show, they also had tamed oxen. In the quaternary period the advancing glaciers and the ice sheets drove the reindeer and other animals from the North into Central Europe, and after them came the hunters who killed and ate them, and the remains of the animals and the men are now found in the moraines and the deposits in the caves of those times, as the ice melted the animals and the men again passed to the North, and since then the northern coastmen have partly tamed the reindeer and keep them in large herds for food or to draw their sledges or to use their tanned skins. In the ancient Indian drawings and inscriptions, it is shown that the elephant had been tamed, and was used there; but although the elephant existed in Africa it was never tamed there, but only hunted and killed for its flesh to be eaten and its tusks for ornaments. In Siberia and the North, the woolly and other mammoths were killed and eaten, but never domesticated. In Babylon several kinds of dogs were bred and trained for hunting the lion and other animals, and they tamed and kept goats, sheep,

oxen, asses and camels for food and for riding on and for ploughing their fields of wheat and other grain which they cultivated by irrigation; and agricultural operations in prehistoric ages together with beans, lentils, vines and other fruits. The Egyptians in times before their histories were written, cultivated several kinds of wheat, sorghum, millet, beans, lentils, gourds, which afterwards spread to places in Africa. Rice was grown by Oorons and other Dravidians in very ancient times in Indian swamps and river valleys, and later in fields floated with water for the purpose, and was early exchanged for other articles by traders and voyagers from India. A wild rice growing in the North American swamps when ripe was gathered into canoes by the women of the tribes of redmen and preserved for food. When the redmen were first visited by Europeans, they were in all places growing maize, and before history this plant had been transported to Asia and grown there in various countries. The banana and the plantain which had grown wild in Asia was cultivated there so long that it had become seedless, and was then carried to Africa and America, and there grown for the fruits, it being found the largest producer of food in return for the least trouble in subsequent cultivation. Gourds were grown by most of the older nations as they were useful to hold water and other fluids as well as being for food. The vine which seems to have been a native of Persia was carried by the expedition of him who was known as Dionysos, to Babylon, and to Egypt, thence to other countries, where its fruits were made into wine or eaten, sun-dried, or when ripe, in many old countries. Barley is first grown in Asia Minor and known as "Zi, the food of life," from there it was taken to Egypt, Babylon and other ancient lands. Onions were grown in Egypt anciently, and given as food to the builders of the pyramids, as the inscriptions there show in large quantities. Inocense was grown in Arabia and Somaliland, and was a large and valuable article of trade for use in the temples to cover the disgusting smell of the blood of the animals sacrificed here, to please the god's thought to delight in their horrid odours. Tea was anciently used in China as far back as the oldest Emperors, and was used for its medicinal properties and virtues. Silkworms were likewise



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then kept by the ancient Empresses, to yield the silk to be spun and woven into silk tissues and fabrics. Coffee was grown and used by the philosophers of Arabia to assist their studies as a brain stimulant, from there it spread about. Chocolate was grown and used by the ancient Mexicans before Columbus destroyed their nation. They thought it the most perfect drink. Mate is grown and drunk in South America, and is regarded as very health-giving and useful as a beverage there. Coca leaves are used to maintain muscular exertion, and to assist in climbing mountains and carrying heavy weights. The kola nut, like tea or coffee, contains *theine*, and is used in several parts of Africa as a stimulant and nervous excitant. The peach is a native fruit of Persia, and has been cultivated from the original almond, until it is now the excellent varieties grown. The orange was anciently grown in the Canaries, and also in China, and is praised magnificently in literatures. The cocconut, originally of Eastern Asia, and thence to Polynesia and other places, esteemed for its nut and the oil therefrom. The mango has developed in India into numerous varieties, as has the *Diosperos Kaki* in Japan and from there spread to other lands. The *gauvers mangostein* growing in Indo-China are there much esteemed as is the *Durian*, which is of a taste that has to be acquired. The abovenamed animals and plants of different lands show that not in one place only but in various ones their domestication long since took place by diverse races. The mythologies of India, Babylon and Egypt all prove the regard in which oxen were held and the value then placed upon them. The Brahmins would not eat their cows, but only used their milk. The Dravidians thought they were sacred animals, so did the Babylonians and Egyptians.

#### Different Modes of Disposing of the Dead.

THE modes by which different nations dispose of their dead has been of considerable interest to anthropologists for diverse distinct aspects, and thus is shown the stage of civilisation to which the tribe or nation has reached or advanced to. It teaches the religious ideas of those who buried in various ways or of those who preserved the bodies by embalming by different methods, or those who left them to be destroyed or eaten by birds or wild beasts. The Persians sects of fire worshippers placed the bodies on the Towers of Silence. These people who placed the valued possessions in the graves with the bodies have thus assisted and have been of great use to ethnography and archaeology. How soon in the palaeolithic ages the systematic burials of the dead were practiced is not yet certain, but burials had become general before the neolithic ages were long established is clearly shown, and from then burials or corpse burnings were widely practiced. Some of the older coverings of bodies in deposits or in cave floors may have been by accidents, but in the later times of the quaternary period the things found with the human dead seem to point to the religious idea that those dead would again live and require the things again that they used and esteemed while alive. This is the ideas held by the redmen of America, and they go back to the oldest mound builders interments for the pipes, neolithic tools and weapons and the bones of sacrificed animals are found in the mounds and in the graves of those times. Some of these mound builders buried, and others buried their dead in the U.S.A. in ancient times. So did likewise the Skythians and other Turanians tribes of high Asia, and likewise erected mounds over their remains. The earliest neolithic people into Great Britain were Dolichocephalic and Brachycephalic the former buried in long barrows, and the latter in round barrows. The Hamites originally in North Africa buried their relations under Cairns, Cromlechs and Men-turs, etc., and as they passed round the Mediterranean shores they continued to erect there structures over their dead, and taught the people they met to do the same. In the earliest burials in Babylonia, the corpses were put into earthenware

coffins and cemented to keep the moisture and air from destroying the bodies and things with them. In Egypt the prehistoric people buried their dead in graves, but from the time of King Mena they preserved the bodies of the dead by turning them into mummies by an elaborate process of applying such things as would prevent their decaying for thousands of years and some of the King's bodies recovered from the burial places are now in the museums of European countries. The tomb of Mena when recently discovered was found to be surrounded by many chambers filled with the things he used in this world, and which it was believed he would require in a future life. From the writings and drawings of the Egyptians it is now well known how extensive and abstruse their views were about what happened after this life. The trials in amenti before Osiris, in this future life and the rewards or punishments following thereon, until the soul was incarnated in a new body to thus preserve in memory. The Kings being deified and worshipped, after their deaths. In Babylonia and Assyria the supernatural beliefs and religious ideas were as constantly taught by their priests as in Egypt, but the burials were different, for while the Egyptian tombs and coffins were covered with hieroglyphs, idiograms and such things the Babylonia graves were not so decorated. The great pyramids built by the early Egyptian Kings to preserve their embalmed bodies, and as a home for the Ka or soul, which lived in the tomb to preserve the embalmed body from any injury by malefactors shows the regard for the dead. In India some tribes buried their dead and others burned them on the funeral piles and preserved the ashes in vases or jars made for this purpose. Sometimes the wives caused themselves to be burned on the same fire pile with their deceased husbands. The writings upon pre-grecian times show how the bodies of warriors or chiefs were burned by their relations with great pomp. Some ancient people burned their dead to preserve them from illtreatment by the enemies, or those who would hurt them. Sometimes the dead were burned to prevent their causing their spirits to haunt and molest those they would injure. The scandinavians and the Vikings buried their chiefs in the vessels that they had used for their



expeditions, and then raised a mound over the vessel dragged ashore, containing the chief in his armour as he fought when alive, and with the things he valued most. The ancient Jews having learned in Egypt and in Babylon the values placed on burial rites took particular care that their beloved dead should be respectfully buried in caves or tombs constructed for the burial places of their dead. The Chinese think more of the tombs than they do of their houses, therefore they prepare their coffins and their burial places during their lives, and construct them for more than the dwellings they reside in, and any disrespect to the tombs of ancestors is a great offence. The most important things belonging to the Phœnicians are the stone sarcophagi, the funeral inscriptions and the carvings. In each European country relics of long past times are found in the grave and tombs from the earliest ages of copper to the ages of bronze and iron, the ornaments, utensils, weapons most prized, are found in the burial places with the dead. In the Grecian and pre-grecian tombs gold, silver and bronze articles and ornaments are frequently found with human bones. In Peru some of the bodies were buried with the knees drawn to the chin and arms by the side and covered with their finest robes and then all corded up, and so sealed in the grave as they rested or sat when alive, and round them elaborate pottery and with the chiefs much gold and silver ornaments. In some tribes the skulls were trepanned to promote peaceful sleeping and rest. In Tchimu, before it was conquered by the Peruvian Incas, large quantities of gold was buried, and has been found by the Spaniards. In Ireland the last King of Tara was buried standing upright with his spear in his hand on his hillside facing his enemies. In the Canary Islands the ancient inhabitants were corded in skin garments, and dried into mummies so that they remained for hundreds of years, and they have been preserved in certain instances even to present times, very much like the Peruvians.

In the cliff dwellings and the caves of U.S.A. the bones of the people have been found where they were laid with many funeral ceremonies. In the Keys of Florida on the mounds built up with sand and shells, the bodies of the dead are first kept above ground until the flesh has disappeared, then the bones are collected and tied in bundles and in processions carried to the bone repositories, and all of them are on the same day buried in the tribal localities. In New Guinea the dead body is dried over a fire and then buried. In parts of Australia the body is laid on a platform of sticks until only the bones are left, when they are buried secretly. In other parts of Australia the knees are drawn to the chin and the opossum rug is fastened round the corpse and buried setting. In Fiji the old people were strangled, then buried, and slaves placed round chiefs, and all buried together to serve for the chief in the next world. In parts of Australia the bodies are placed in hollow trees, or fastened among the branches, but trees are marked near the graves. In the Roman Catacombs the bodies are buried in niches, cut in the rocks, and then built up with stone and cement, with inscriptions. In certain burial places in Egypt the bodies of Kings and Queens have been removed several times to keep them from desecrators. In N.W. America the bodies, after lying in state for weeks, are placed in their clothes in a coffin and a Totem post placed near. In Britain witches, wizards and similar were buried in cross-roads with a stake driven through them to keep them from haunting people. In Bolivia and parts of Peru they put their dead into Huacas or round towers built for interment of the dead of the people generally. Among certain tribes it was the fashion to collect heads and dry them for preserving. These were kept with great care, and shown upon certain ceremonial occasions. This custom extended through Australasia and South American tribes.

#### What are the Chief Causes that Produce Alterations in Race Types?

Various solutions of this problem have been placed before anthropologists for their consideration and study. Among these causes many persons have fancied that diverse climates have produced the alterations. But the more carefully examined evidence is all against this, as it is proved that diverse races have dwelt side by side for hundreds and even thousands of years, and yet their descendants remain of the same racial type. The Spaniards took negroes with them to America, and other negroes have been transported there ever since, and yet the race types of the negroes, of the whites and of the red men of America are of the same types now as they were when hundreds of years ago their ancestors went to America, and from the extreme north to the extreme south the native red men still retain the typical features of the races from which they originated. In the Andaman and in the Philippine Islands the little Negritos where uncrossed have remained for hundreds of years without changing race peculiarities. In India the Negritos, the Papuans, the Dravidians and the white races have lived together for hundreds of years, and yet when they have not intermarried their descendants are as of distinct types as before they went there and resided in the same climates, there living under the same climatic conditions. In Egypt the portraits of the black, the red, the white and the yellow Asiatics as they were drawn or copied from the originals or models thousands of years ago are exactly like those different peoples are to-day, and have under the same climate not grown any more alike than they were at first. From the foregoing and hundreds of other instances that could be named or noticed it must be quite clear to all that the alterations in race types are not produced by different climates but are really only altered by the intermarriages of the differing race representatives. But then there is the law which causes all hybrids or mongrels to either become extinct in a few generations or for their offsprings to return by what is called "Atavistic revisions" to the original race types of the more potent parent who intermarried with another. It has also to be remembered that from the skulls and other bones found in



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the deposits in the Quaternary period it may be found or learned that races distinct at that epoch have had descendants who have retained the same racial characteristics from then until the present time, having passed through glacial and hot climates for thousands of years without important changes. It is therefore evident how persistent race types are and that climatic alterations do not affect them by material modifications. As radical changes of race types and features are not noticeable, as far back as the Quaternary period, it may be believed that it was not climate that altered race characteristics; the original, or at least as far back as the Tertiary that similar types to those of the present have descended among *un-crossed* offsprings. The Dolichocephalic and the Brachycephalic races have each come down from the Quaternary to the present ages. But there is a race feature, that from the Quaternary to the Pliocene portion of the Tertiary attracts our attention, and that is the *height* and the cubic spacing for the brain, and the other contents of the crania. In the Canstadt race, or the Neanderthal, the skull was flattened and the interspatial dimensions were smaller than in men of the present. In the Trinil man of Java of the Tertiary Pliocene Strata the skull was more *flattened* and the internal space for brains, etc., was less than in the Neanderthal man, and much more so than for any, except *microcephalic* idiots, in whom similar flattened skulls and small brains are found. Recognising that it is the *cranium* and the *contained brain* that the highest Anthropoid Apes sink so much below any races of men, it will be found from that circumstance and other matters related thereto, that it is from the evolution and developments of the brain, its membranes and other tissues and its enclosing skull that these are, among other circumstances, the causal producers of the evolutions and development of different and distinct races. In the Eocene and until the Miocene parts of the Tertiary, when the races of mankind were developing and evolving from the common ancestors, the increasing parietal portions of the convolutions with the evolving cortical layers not only enable the men to perform conscious willed actions better, but to devise and invent better means of protecting themselves and obtaining larger quantities of better

foods, and by their increased *muscular sense* to move while erect, and likewise to employ articulate words instead of mere calls and warning sounds. The added materials of brain in the upper parietal regions, and thus elevating those portions of the skull, while the reflexes, sensations and consciously-willed motions, added to the height of the frontal or anterior lobes of the forebrain, thus enabling conscious perceptions to be better obtained with the reflexes thereon following. The erect position, the higher and larger skull followed upon each other from *sequent* causes, also affected the circulation and the altered growth of muscles and other organs, leading to such diversities that from these alterations of race types were evolved. Thus were the different races formed in the Tertiary, some of them enduring until the Quaternary times and in modified forms, even to the recent period. It is therefore not climates but by brain and nerve developments that race types have originated in long past times and by heredity have been perpetuated, unless altered by crossing of different races. But the different races possess, by their nerve developments, those qualities which best enable each of them to live healthiest in different climates, as the blacks in tropical countries and climates, the Esquimos in Arctic countries, the white races in temperate regions and the yellow races in Asia, in which places they each increase in numbers and remain healthiest, while in other localities they differ in several ways. It being the nerves and brain evolutions and functions that have formed the different races and have adopted them to the several countries and climates where they enjoy the best health, these are the chief causes which have produced race types. As to whether races can be acclimatised so that they can live and work in a climate and conditions different to their own is very doubtful, and the available evidence is against it. Crossing for a few generations does not satisfactorily accomplish such results, but rather shows that they turn back to the race type most suitable to the climatic conditions and circumstances. Thus in Spain, Italy, France and other southern lands where there was formerly blond peoples these have now become brunettes, while in Africa the Portuguese are becoming darker each generation, and the Goths and Vandals

in North Africa have died out, and the once fair Greeks and Romans no longer exist. Crossing or hybridising may alter a people for a few generations, but they fall back to one of the parental race types as soon as the hybridising is discontinued, as all breeders of livestock can tell. The long-headed or Dolichocephalic races were the first in Europe and they managed to survive through all the cold and hot times until we find their descendants in the Frisian Islands, especially that race to which the Neanderthal man belonged. In these Dolichocephalic races the convolutions of the brain in the parietal regions of the skull are most developed, and upon these the cortex controls conscious and voluntary motions and impulses. We therefore find in these long-headed people the powers of invention and persistent advancements most exhibited. The Brachycephalic races are most conservative and unchangeable and least inventive, but holding to their borrowed arts with great persistence, as in most Asiatic nations. It may be believed that the characteristics of each race are derived from the nervous centres in the spinal, the medulla oblongata, the optic thalami, where they are gathered into the ganglia of those organs and from there transmitted to the conscious centres in other parts of the brain, from where reflexed impulses are transmitted to the *corpora striata* to be sent to muscles for motions. As soon as these parts began to develop from the common ancestors in the Tertiary period the several races and types came into existence and then began their human inventions of language, implement invention and manufacture to supply their increasing wants and desires. The erect position was assumed to better carry and move the headgear, whose increased weight made it heavier to carry in the position of the lower animals, without such an increase of weight as men were evolving, but from the findings we cannot believe that it took a long time for men to straighten their knees and walk upright, for the olden races of men walked with bent knees.



**The Selfish and Delusive Craze of Australia for Australians only.**

In this country at the present time there is an attempt to stop immigration and to keep out all classes of workers, and to only permit those who were born here to live and share in the work of this great land. All others are to be hindered or obstructed by their more masterful fellow workers, who wish to prevent any, or every, competition with their proposals by which they think to get great wages for little work, and to accomplish this they hope to prevent the entry of all strangers, even those from Great Britain coming here, except by regulations made by them and for their benefit, they being such monopolists. At present there is only a fringe of settlements round the coasts of this great continent, and the interior and the northern parts of it are an unsettled wilderness, without the necessary people to use or cultivate it, although it requires hundreds of millions of people to properly occupy and settle upon its waste lands, and to carry out mining, manufacturing and cultivating the present waste lands. Even those industries that have been begun in the north-east are being destroyed or prevented from expanding because there are not suitable labourers to carry them out.

Sugar could be grown in large quantities if suitable labour was to be had by the growers, which would then employ in the factories and other places the men who say they are now out of work. Cotton also could be very extensively grown in the hotter parts, or in the tropics, if the labourers who could work in the sun were brought under contract to work in the north, and thus employment would be provided in the factories for numerous families to remove the seed, make it into oil, &c. A great amount of agitation is kept up, and great regret is expressed at the unemployed, but in this country there is no necessity to have any unemployed, if they are willing to work, and new enterprises are encouraged in the country districts, and if the unemployed will there work in an earnest and energetic manner, so that the employers may make a fair and reasonable profit from their enterprises. But the prevailing fashion of strikes and trade disputes will soon ruin the prospects of the labourers, as well as the employers, if they are not soon prevented, as the agitators will

make employment impossible, as they keep up such a continual strife that the would-be employers will close their premises and take their capital, skill and enterprise and remove to other countries that will welcome them and protect them in their trades or business. Every one who thinks, knows that it is the disturbance of trade, or manufacturing, which is kept up continually by the agitators, that has produced the crowds of unemployed, and will continue to add to them. The Governments have, likewise, by interfering with traders and manufacturers, done great harm, and the attempts to artificially force up wages by making seven shillings a day the minimum wage, has thrown thousands out of regular work, and then the performing of unprofitable works, upon borrowed capital, could only act as it has in throwing the labourers out of work, when these large sums of monies, borrowed, were spent upon unproductive works. The absurdity of trying to prevent the six haters from landing here has done enormous injury to this country in preventing proposing employers coming with their capital and these engaged men, &c. Then the next mischief was the absurdity of trying to prevent coloured stokers, who were British subjects, working in the stoke holes of the mail boats and other British vessels, although these being natives of torrid climates, could work in the heat which would kill white men, and where they could not so well do the work, and the consequence is the steamship owners will no longer allow their vessels to come here and bring the mails, or to carry cargo, thus throwing out of work the wharf and other labourers who would have found work in connection with these vessels. All this is very different to the way that the U.S.A. have encouraged and promoted immigration in every possible way; and have thus occupied so much of their continent by raising the population to nearly eighty millions of people, and still adding to these by inducing others to come and settle there. By which they are turning hundreds of thousands of acres of desert lands, by irrigation, into fertile fields, fruit gardens and vineyards under profitable culture to all concerned. Canada also intends to rapidly increase her five millions of inhabitants by obtaining immigrants from all countries, and settling them upon her spare lands, and by this

means she is increasing her exports of wheat and of agricultural produce with the machinery she makes and sells, and also sending away the timbers her saw mills are cutting from her forests. Every year her exports are increasing, and her wheat-growers are increasing by thousands, and taking farms in the great Saskatchewan Valley and the Manitoba Plains. These immigrants are from Russia and many other countries.

The Canadians are proposing to establish reciprocal trade with Great Britain to so accomplish preferential trading with Britain, and also to at once form a trained Militia of one hundred thousand men, to assist the British Empire in any need. Instead of such advances as these, the leaders of Australians prefer to allow no immigrants to occupy her waste lands, and to have no part in reciprocal trading, but to maintain such a free-trade that foreign ships can dump their country's products on Australian harbours to their injury, and that of the home countries, which provide a fleet and army for their protection, and without which some of the land grabbing nations would seize Australia immediately, or a combination of them could divide it amongst them. The greatest want of Australia is people who will bring their capital, skill, and labour to skillfully procure waste and use it upon the waste lands of the interior, the same as has been done in California and other parts of America, and thus what is now called desert, would be turned by irrigation into fruitful fields and orchards, or farms of intense culture. With work of this extent there could be no unemployed, unless of those who will not work. The useless dwellers of the towns should be drafted into the country and on training farms, and "labour colonies," as in other countries, be caused to earn their food and clothing, and while doing this be trained into farmers, orchardists, or gardeners, so that they could provide for a family on pieces of land. At present these town dwellers are supported either by the Governments or charitable persons, but they should in one or two years' training, as market gardeners, be caused to earn their own and their family's living; for what a Chinese can do in that way there is no just reason why a white man should not be trained to do so, and so put an

*To be concluded.*

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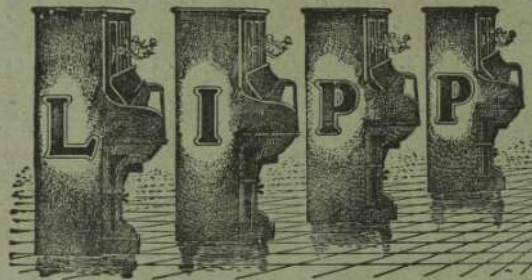


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