

## SCIENTIFIC MUSEUM.

## Old Civilization--Layard's Nineveh.

Many shallow philosophers entertain the notion that man commenced his existence as a wild savage of the woods, and that his progress has been step by step to his present elevated position in modern civilization. No man entertaining such opinions can retain them after reading Layard's Nineveh and Babylon, a work recently republished in excellent style by the great American house of Harper & Bros. of this city. At a time far anterior to that of historical record, excepting what we have in the Sacred Scriptures, there were races living and dwelling in Asia, who were highly civilized, and who were acquainted with sculpture, architecture, music, and civil policy; a race who built splendid palaces and adorned them with some of the choicest works of art, of a kind which have been thought by many to be but recently discovered. The saw, the shovel, and the axe, instruments in general use among all nations now, were also used by the serfs of Nineveh and Babylon; the speaking trumpet was even known in those days. In the illustrations of this book there is a representation of the mode by which the ancient Assyrians moved heavy bodies. A colossal winged bull is represented to have been placed on a sledge having rollers, and drawn by great bodies of men pulling ropes. Another body of men are represented as assisting with levers, and Mr. Layard remarks that this was the plan he employed himself to remove the same piece of sculpture (which is now in the British Museum.) The old Assyrians were acquainted with making twisted rope, an art of which their descendants are utterly ignorant. The builders of the Assyrian palaces employed large slabs of alabaster, on which are representations of captives drawing these huge slabs, many of which are believed to be the forefathers of the present race of Jews. But however skillful they may have been in moving large stones, it would no doubt have done them good had they been permitted to see how us Yankees make frame houses travel through our streets.

The inscriptions on alabaster slabs and blocks, discovered by Layard, have been translated by Col. Rawlinson and Dr. Hincks, and corroborate the correctness of the Bible, and what is very remarkable, the translations of the stone writing, agree exactly with the sacred text in stating the amount of gold (30 talents) taken by Senacherib, from Hezekiah, King of Judea. A chapter of intense interest to men of science in this work, describes the discovery of arched drains, vases, and kettles of copper; bronze bells, bronze cups; ivory and mother-of-pearl studs, fit for the shirt bosom of a modern beau; a bronze strainer, &c., in short, the Assyrians appear to have been better acquainted with the making of bronze vessels and figures than the moderns. Glass bowls were also discovered, but what is more interesting, is some picks and saws made of iron. This metal was long supposed to be unknown to the ancient Asiatics. Among the glass articles discovered was a rock crystal lens, with opposite convex and plane faces. It is the most ancient specimen of a magnifying and burning glass known.

We have long entertained the opinion that savage races are blasted limbs torn from the trunk of a higher civilization, and this book deepens our conviction respecting the correctness of this theory, opposed as it is to the jargon of a shallow, unphilosophical, but declaiming sect of the present day, but agreeing with every deduction that can be drawn from the remains of ancient cities, roads, &c., found in every part of the world.

## Artesian Well.

The artesian well on Court House Square has reached a depth of 475 feet. The water now flows from the top, running a stream of about two gallons a minute. The water is excellent, and (which is somewhat unusual at that depth) as cool as ordinary well water. The workmen are now drilling through a rock, below which, the skillful superintendent has strong hopes that a copious supply of the genuine fluid will be found.—[Montgomery (Ala.) Journal.]

(For the Scientific American.)  
Entomology.

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## V. APHANIPTERA—(Hidden Wings.)



Pulex Irritans.

This order embraces but one family, the *Pullidae*, or Flea tribe. These pigmy tormentors are suctorial, of minute size, have only the rudiments of wings, will drag twenty-five times their own weight, and leap two hundred times their length. The rostrum is setaceous, inflected, and armed with a sting. The Hungarians put them to flight by greasing their linen, which disgusts the vermin; and Queen Christina shot at them with a cannon of liliputian caliber. The jigger or chegre (represented above magnified), is a West Indian species, smaller, but more hateful. It generally attacks the feet (preferring those of foreigners), and nidificates between the skin and flesh, often rendering amputation necessary.

## VI. APTEA—(Wingless.)



Podura Villosa.

These parasites connect true insects with the Myriapoda. They undergo no metamorphosis, and constitute two families—the Louse tribe, and Spring-tails. Different species of the former are restricted to particular animals; two infest man. The body is flat, divided into a dozen parts, and fitted with short legs terminated by stout nails. The eyes are almost wanting, and the mouth is like a snout, furnished with a sucker. The female gives birth to 5000 in eight weeks; they are not subcutaneous, and produce the disease "phthiriasis." New Zealanders and Hottentots eat them; and in ancient America a poll tax of lice was exacted—bags of the precious treasure being found in the palace of Montezuma. The legs of the sugar-louse are terminated by long jointed bristles. The abdomen of the spring-tail has no appendages; but its extremity is prolonged into a forked tail, by which the animal leaps. Their scales are beautiful under the microscope, and are employed as test-objects by reason of their delicate markings. Some species are found beneath stones, others on plants and trees; and when congregated they look like gunpowder.

## Climate of California.

The climate of California may be divided into three seasons. The rainy or wet season, the season of the dews, and the dry season, in which neither rain nor dew falls. The rainy season commences about the first of December and terminates about the 15th of April. The second season embraces that part of the year when the evaporation is greatest, and the moisture of the earth is converted into dews: this season lasts from one month to six weeks. The dry season includes the summer months, and continues until the rain sets in. California contains as many different changes of climate as can be found south of latitude 42° N. to 23° S. latitude, owing to the present division of seasons, the atmosphere is divided into two kinds, wet and dry. It may be said, however, that the coast wind is more or less humid at all seasons of the year. St. Francisco is exposed during the summer months to damp and chilly winds, whilst the winter brings a mild and wholesome season, with a balmy atmosphere. The interior does not suffer from this influence. The humid atmosphere occupies that part of the year in which the rains predominate, and the season of the dews. The winds generally prevail during the summer S. S. E. in the interior, and on the coast the prevailing sea breezes constitute the chief winds.

The climate, like other countries, may, in process of time, become more genial to agricultural pursuits, and the health of those who

have or may hereafter make this State the home of their adoption. Historical facts support this position. The climates of European countries were more severe in ancient times than they are at present. Cæsar informs us that the vine could not be cultivated in Gaul on account of the cold winter. The reindeer now found in the zone of Lapland once inhabited the Pyrenees; the Tiber was frozen over and the country surrounding Rome was covered with snow several weeks together, which rarely happens in our time. The Rhine and Danube, in the reign of Augustus, were generally frozen over for several months of the year. The improvement which is continually being made in the climate of America proves that the power of man extends to phenomena, which, from the magnitude and variety of their causes, seem entirely beyond his control.

At Guiana, in South America, within five degrees of the line, the inhabitants living amid immense forests a century ago, were obliged to alleviate the severity of the cold by evening fires, even the duration of the rainy season has been shortened by the clearing of the country, and the warmth is so increased that fires now would be deemed an inconvenience. "It thunders continually in the woods, but rarely in the cultivated parts." It is probable that in the course of time, and after the settlement of the country, the habitable portions of California may become, in its seasons, more regular and better adapted to agricultural and other pursuits. Should such changes take place as history records to Italy, then indeed is California a favored land. Yet drainage of the ground and the removal of forests cannot be recorded among the causes of increased warmth of the Italian winter.

The elevation of the highest peaks of the Sierras is about 17,000 feet above the level of the sea; Pleasant or Red Lake about 9,000 feet; Pleasant Valley 3,864 feet, and is the nearest habitable place to the mountains. Their mean elevation above the sea will range from 1,000 to 1,700 feet; the mean temperature of the atmosphere, from the best calculations, being about 72° Fahr.

The fogs in autumn, on the coast, are checked in their advance to the interior of the coast range, thus leaving the dry atmosphere free from these additions. It is a fact worthy of notice in this connection, as well as to establish the positive purity of the atmosphere in the interior, that its effect during night, as well as in the day, upon the human body, invigorates the system, and is so refreshing that persons prefer sleeping in the open air, without other covering than the broad canopy of heaven.

It may be said with certainty, that neither homo, nor idio, nor vegetable, nor animal miasmata exist to any extent that would create disease, and on the whole it may be considered a healthy climate, particularly in those sections where there exists a uniform evenness in the atmosphere. It may be regarded as more pleasant and agreeable than the climate of any other part of the United States.

The above is a condensed statement from an article in the "Western Journal," by Geo. M. Willing, M. D.; we seldom see an article upon this subject upon which we can depend for truthfulness; almost as many ideas exist as there are inhabitants in the new State. The above is probably for the most part correct.

## St. Louis Removed to the Country.

Much apprehension, it is said, is now and has long been felt in St. Louis, that the action of the waters of the Missouri, where they enter the Mississippi above that city, will eventually wear away the Illinois shore to such an extent as to force a new channel for the great father of waters, and thus leave St. Louis some five or six miles out in the country. The present flood, as usual, is tearing away the bank, having washed off a mile and a half of the telegraph line near Alton, with all the land on which the poles were planted. The editor of the "Alton Courier" says:—"As much abrasion of the Illinois shore for the next ten years, or even five years, as has been occurring for a few years past, and the lakes and the lowlands above spoken of, will be reached. The Gillham farm is now nearly all swept away, and the old dwelling

house, which has already been moved once or twice, will soon have to be removed further back or torn down. Where we rode along in our conveyance, on the public road near this place, some three years ago, is now 150 feet out in the stream of the sweeping Mississippi."

## Skylarks.

A colony of sky-larks, forty-two in number, were recently imported from England by a gentleman of Delaware, with the hope of perpetuating the species in this country and thus adding a songster of much renown to our forest choir. The birds flew from the place at which they were released in various directions, and, for the most part, in flocks of three to twelve, alighting mostly within sight, upon adjoining farms.

In all likelihood the experiment will fail as the larks build their nests on the ground and in a country, where snakes and such vermin are numerous, their eggs and young will be destroyed.

## LITERARY NOTICES.

HINTS ON THE DAGUERRETYPE, etc.—Edited by J. H. Croucher. This work embraces directions for obtaining photographic pictures by the calotype, and engravings, also upon albuminized paper, and glass, by collodion and albumen, etc., including a practical treatise on photography, the heliochrome process, etc. It also includes full directions for taking pictures by the Daguerreotype process, with the latest improvements in fixing colors, &c., illustrated with engravings, and is a work of great value to experimenters, and indeed all who take an interest in this class of investigations. It is neatly bound; for sale by A. Hart, Philadelphia, Pa.

ELEMENTS OF MECHANISM—Explaining the Principles of the Construction of Machines, by F. Baker, C. E., is a work designed for the use of schools or students in mechanical engineering, and is well calculated to facilitate investigation in this branch of science; the whole is carefully arranged and illustrated with 343 engravings. For sale by A. Hart, of Philadelphia.

THE SPIRITUAL MEDIUM—This is a neat little volume, published by Gould & Lincoln, Boston, and contains some exceedingly curious and rare information. The author is evidently a scholar and fond of reading marvelous works of old and new authors. He believes in a nervous or spirit principle.

PUTNAM'S MONTHLY—For July, is an excellent number, it contains an unusual amount of valuable information, and is illustrated with fine engravings. Published by G. P. Putnam & Co., No. 10 Park Place, N. Y., and Sampson, Low, Son & Co., London; price \$3.

BOOK OF THE WORLD—We have just received No. 10 of this beautiful work; it has four beautiful plates: The Passion Flower, The European Butterfly, and the African Snake are colored plates. It is filled with choice matter. Published by Weik & Wiecek, 195 Chestnut st. Phila.

"Harry Coverdale's Courtship, and what came of it" by the author of "Frank Fairleigh," "Lewis Arundel," etc. H. Long & Bro. 43 Ann st. This is a very captivating novel, and will pay perusal from those fond of romantic literature.

"Young Ladies' Keepsake and Home Library," for June, is received; it is a choice number, beautifully embellished. Published by J. S. Taylor, No. 17 Ann st.



## Manufacturers and Inventors.

A new Volume of the SCIENTIFIC AMERICAN commences about the middle of September in each year. It is a journal of Scientific, Mechanical, and other improvements; the advocate of industry in all its various branches. It is published weekly in a form suitable for binding, and constitutes, at the end of each year, a splendid volume of over 400 pages, with a copious index, and from five to six hundred original engravings, together with a great amount of practical information concerning the progress of invention and discovery throughout the world.

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