

Recent Archæological News.

It is said that an unknown ruined city of large area, with two temples and two pyramids, has been discovered in the state of Guerrero, Mexico, by Mr. William Niven, a well known mineralogist.

Gross vandalism has destroyed some interesting Druidical remains on Dartmoor. The stone avenue at Bel Tor corner on Sherburton Common and many "hut circles" and "menshirs" have disappeared. The stones have been broken up by contractors to furnish material in mending adjacent roads.

In one of the chief squares of Patras some important sculpture and an ancient mosaic pavement have recently been discovered. The most important piece is a statuette which is undoubtedly a copy of the Athene Parthenos of Phidias. The head and arms and part of the shield are missing, but it is hoped they may be found on further excavation.

A heathen burying ground, with giant skeletons, was recently dug up at Mitterndorf, in the Austrian Salzkammergut. Many of the bodies were six feet seven inches tall: they were all buried with the feet to the east, each inclosed in a circle of stones, with a stone under the head. Large earrings and finger-rings were found on them, and one skeleton held a knife in its hand. No signs of Christian burial were discovered.

A new "Survey of London" is being prepared, under the editorship of Sir Walter Besant, which will give an account of every important building, institution, and company in the whole of Greater London. It will contain a history of the city, its trade, political power, and customs, and will be a complete record of its condition at the end of the nineteenth century. The book will be in eight quarto volumes, fully illustrated, and will be published by the Blacks.

Cornell University, which for some years has had the finest archæological museum of any American university, has just added to it a collection of rare specimens of ancient Greek pottery, showing the development of the art from the beginnings about 1500 B. C. to its perfection about 450 B. C. These were purchased for the university by Prof. B. I. Wheeler while in charge of the American School at Athens last year. A collection of ancient Greek coins, bought from the same appropriation, has not yet been catalogued.

The London Society for the Protection of Ancient Buildings has written to Lord Cromer concerning the defacement of Nile scenery in consequence of the blasting operations now being carried on for the purpose of obtaining limestone for the embanking of the river. The petitioners point out that although stone has always been obtained from the cliffs of the Nile, yet the ancients never procured it in the present wasteful manner, and suggest that certain spots should be selected to take the stone from, and that in future the quarries should be driven into the rock, instead of prominences being blown away.

At a recent sitting of the Academy of Inscriptions, a letter was read from M. Gaukler, Director of Antiquities in Tunis, reporting the discovery at Susa of a well preserved mosaic, the central figure in which is believed to be Virgil. Dressed in a white toga with blue border, he has on his knees an open papyrus containing the eighth line of the first book of the *Æneid*. The Muse of History and the Muse of Tragedy, standing on each side, are listening. The central figure, beardless and with short hair, agrees with ancient miniatures of Virgil, the only portraits hitherto known. The mosaic is thought to be a contemporary copy of some celebrated work, perhaps of one of the vignettes mentioned by Martial. The Academy showed great interest in this discovery.

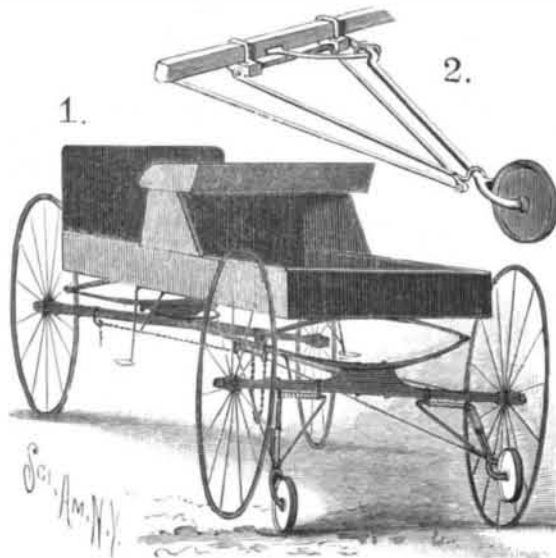
The Norwegian traveler, Sven Hedin, has contributed to a German journal, *Globus*, an interesting account of his journeyings in Central Asia, in the district north of the Kwenlung Mountains. Ruins of large towns were discovered which have been buried by successive sandstorms spreading over a thousand years; hence very modern from a Petrie point of view. Separate houses were uncovered of very fragile construction, consisting of wooden pillars, while the walls were put together of plaited reeds covered with mud. The latter were rendered at once impervious and suitable for decoration by being coated with white plaster. Drawings were discovered on these walls, and well executed, of human figures, horses, dogs and flowers, and, judging by the copies which have been brought back, of no small artistic merit. Small figures of Buddha were also dug up, as well as various fruit trees, which told a tale of the bygone days when this arid surface was once made fertile by the waters of the river Kerija.

Dr. Dörpfeld, in one of his recent lectures in this country, expressed the opinion that the latest archæological explorations in Greece, richly rewarded as they have been, instead of exhausting the field, have, as yet, barely made a beginning in the work of bringing to light what Greece has to offer in the way of archæological information, says the American Architect. So far as the classical period of Greece is concerned, Delphi, Olympia, and the cities of Asia Minor have still much to show, but the greatest discoveries are probably to be made in the ruins of the prehistoric period,

at Mycenæ, Argos, Medea, Orchomenos, and other places. The remains of ancient Argos, which, according to the legend, was built by seven one-eyed giants from Asia, have hardly been touched, and, after the discovery of the body of Agamemnon amid the ashes of his palace at Mycenæ, it would be hard to say that the bones of Jason, if not, indeed, the talking prow of the Argo, may not be exhumed in the more ancient city, which, even in historical times, showed the tomb of Ariadne. It seems to be settled that the inhabitants of Argolis at the Homeric period were ignorant of the use of writing, thus confirming the ancient tradition, that the poems of Homer were not written, but handed down by verbal repetition for many generations before they were committed to writing; and everything that can be learned about the people who have for three thousand years been regarded as demigods and heroes is doubly interesting, not only as an addition to the legends which have made Jason and Medea, Orpheus, Æsculapius, Theseus, Castor and Pollux, Admetus and Atalanta, and the other Argonauts, nearly as familiar to us as they were to the Roman youths two thousand years ago, and to the Greeks a thousand years earlier still, but as a contribution to the early history of the human race.

A VEHICLE RUNNING GEAR ATTACHMENT.

To facilitate the making of short turns with a vehicle is the object of the improvement shown in the accompanying illustration, according to which two small wheels or casters arranged beneath an axle may be made to engage the ground and lift the main wheels, so that the distance between the wheels supporting the axle will be diminished. The improvement has been patented by Archie D. Blodgett, of Berlin, N. H. Clamped to the rear axle are clips with bearing plates in which are held two horizontal shafts, each carrying



BLODGETT'S VEHICLE RUNNING GEAR.

at one end a vertical shaft and at the other end a downwardly extending brace, the lower ends of the braces having bearings for the lower ends of the vertical shafts, and each of the latter carrying a caster wheel, as shown in Fig. 1. Springs connected with the vertical shaft tend to keep the axes of the casters transverse to the reach and springs on the horizontal shafts tend to throw the vertical shafts rearward and upward, away from the ground. Rigidly held on the under side of the reach is a guide plate, on each edge of which is a slide co-operating with an arm carried by a thumbscrew in the sides of the reach, the arms swinging to allow the slides to move freely or hold them at the limit of their movement. Projecting downward from each slide is an arm, and both arms are connected by rods with the bearings of the shafts near the casters, the arms being adapted to be locked, to be moved in unison, and being also connected by chains to each side of the front axle. The arrangement is such that, as the vehicle turns to the right, the left hand chain will be drawn on, moving the left hand slide, and swinging the corresponding vertical shaft downward, when its caster engages the ground and lifts the left hand main wheel. When it is desired to have both the casters engage the ground, the slides are connected with each other by a locking bolt, when both casters will engage the ground as the vehicle turns in either direction. Fig. 2 represents a modification of the improvement in which the use of the spiral springs is avoided, and spring arms carried by the rear axle are employed, the modification being more especially adapted to vehicles in which it is inconvenient or undesirable to attach the rods to the reach.

DOMESTIC fowls have two diseases of a diphtheritic nature, according to a report of M. Gallez to the Belgian Academy of Medicine. One is a contagious catarrh, called also morve, or fowl glanders, which is very contagious and fatal to hens and may give diphtheria to human beings. The other, though called fowl diphtheria, has nothing save the name in common with human diphtheria.

Science Notes.

Prof. Fresenius disclaims any confirmation of M. Barrière's alleged discovery of a new element, "lucium."

The tercentenary of the birth of Descartes was celebrated at Tours, recently, by the local archæological society.

The collection of fossils made by the late Prof. Sir Joseph Prestwich has been presented to the Geological Department of the British Museum by Lady Prestwich.

Dr. Roux has accepted a decoration from the German Emperor. Pasteur declined a similar honor, but the conditions were slightly altered in the present case, and Dr. Roux very properly did not decline the honor.

A magnificent daylight meteor was seen by Prof. Brooks at the Smith Observatory, Geneva, New York, on the afternoon of January 19, soon after sunset. It exceeded Venus in brilliancy and moved slowly southward across the eastern sky.

By thermo-electric methods Messrs. Holman, Lawrence, and Barr have recently fixed the melting points of the following metals: Copper melts at 1,095° Cent., silver melts at 970° Cent., platinum melts at 1,759° Cent., and aluminum melts at 660° Cent.

M. Levat has recently made a communication to the Paris Academy of Sciences on the tempering of steel in phenol. From comparative trials on the same steels tempered in water and phenol respectively, it has been found that the hardness and elasticity in the latter case was much greater than in the former.

In mediæval times rhinoceros horns were employed for drinking cups by royal personages, the notion being that poison put into them would show itself by bubbling. There may have been some truth in the idea, as many of the ancient poisons were acids, and they would decompose the horny material very quickly.

A bill to promote aerial navigation has been introduced by Representative Baker, of New Hampshire. It is proposed to give \$30,000 to Prof. Langley, \$20,000 to James Selden Cowden, of Virginia, and \$20,000 to the War Department. There is little chance of such a bill being passed, and it is a question if public money should be used for such a purpose.

M. Gaston Tissandier, who, for the last quarter of a century, has presided over *La Nature*, our excellent French contemporary, has just retired from the editorship and M. Henri de Parville has succeeded him. The character of this model scientific journal will not be changed, and it is to be hoped that the high degree of success which has attended this journal in the past will continue to be enjoyed by it.

Krafft-Ebing, of the University of Vienna, according to the *Medical Times*, New York, enlivened his instruction lately by allowing a madman, one of his patients, to lecture on mental diseases in his stead. The man is afflicted by periodic attacks of mania, during which he is much more clever and witty than when sane. His lecture on "The Mental Condition of the Maniac in Periodical Attacks of Madness" was a brilliant success. After it was over he was shut up again.

The hot lakes district of New Zealand, covering an area of 1,000 square miles, is very actively and peculiarly volcanic. The particular attraction of the district lies in the changes that are continually taking place in it. Almost from day to day extraordinary transformations are worked by heat, fire and steam. The greatest of the volcanic mountains, Ruapehu, rises to a height of 9,000 feet, and one of the geysers is estimated to throw water and steam to a height of 180 feet, while the lakes, ponds and pools contain water of every degree of temperature.

The toxicity of the flesh of poisoned animals may easily prove a source of danger, and at a recent meeting of the Medical Society of Berlin, Lewin recounted some interesting experiments made to determine the toxicity of such flesh. Having given 20 centigrammes of strychnine to a fowl, he gave its flesh to a dog to eat. After the first 225 grammes the animal became ill; after a second portion it was seized with tetanic convulsions and died. The experimenter found that some animals are very tolerant of certain poisons, for example, fowls to strychnine, goats to hemlock, partridges to arsenic, rabbits to nicotine. He considers, says the *Pharmaceutical Journal*, that although animals may have ingested poisons without inconvenience to themselves, it may easily follow that their flesh will prove toxic to man if used as food.

Wm. Crookes, F.R.S., of thallium and radiometer fame, in lecturing on "Diamonds," at the Imperial Institute, says Knowledge, disclosed some interesting facts. He mentioned that the four principal mines (Kimberley) employed about eight thousand persons. From two to three million carats of diamonds were turned out in a year, and up to the end of 1892 ten tons of diamonds, valued at £60,000,000, had come from those mines. In 1895 there were found 2,435,541 carats of diamonds, realizing £3,105,958, at an expenditure of £1,704,813, and leaving a profit of £1,401,145. The largest known diamond, weighing 970 carats, was found at Jagersfontein mine, and was now being cut at Amsterdam. But even diamond mining has limitations, for Mr. Crookes said the mines were capable of yielding more, but they were limited to a certain output in order to maintain the price.