

plants to be experimented upon, a selection of geraniums and a rose tree were placed in two deep boxes, of, to all appearance, common garden mould. and, having been covered with glass shades or bells, each having a small hole in the top, which was at first plugged, M. Herbert proceeded to water them, if we may use the word, with some-chemical amalgam, which acting upon the chemicals already in the earth, for it was evidently, and, indeed, was admitted to be prepared for the purpose, caused a high degree of heat, as was evinced by the rising of a steam or vapor within the ball, which was allowed in some measure to escape through the hole alluded to, and, indeed, by the feel of this vapour, M. Herbert appeared to regulate the heat necessary to effect his object. In about five or six minutes from the commencement of operations, the buds on the geraniums began to open, and within ten or twelve minutes they were in full bloom, and the blossoms distributed among the ladies present. The experiment with the rose-tree was unsuccessful, M. Herbert alleging that it had only been in his possession about half-an-hour, and he had, therefore, not had sufficient time to prepare it. From this it will be seen that the whole of the operation is not so instantaneous as would appear to the mere looker-on at the moment of blossoming; but, nevertheless, the invention may prove useful to those who wish to deck their boudoirs or drawing-rooms with flowers before nature brings them forth in due course.—*Observer.*

ANCIENT BABYLON.

It may be known to many of our readers that the French Government has employed a party of gentlemen to explore the site of ancient Babylon. From reports just received from them it appears that they have ascertained, beyond reasonable doubt, that the ruins beneath a tumulus called the Kasr are those of the marvellous palace-citadel of Semiramis and Nebuchadnezzar. They are in such a state of confusion and decay that it is impossible to form from them any idea of the extent or character of the edifice. They appear however, to extend beneath the bed of the Euphrates—a circumstance accounted for by the change in the course of the River. In them have been found sarcophagi, of clumsy execution and strange form, and so small that the bodies of the dead must have been packed up in them—the chin touching the knees, and the arms being pressed on the breast by the legs. These sarcophagi have every appearance of having been used for the lowest class of society; but notwithstanding the place in which they were found, the discoverers are inclined to think that they are of Parthian not Chaldean origin. There have also been found numerous fragments of enamelled bricks, containing portions of the figures of men and animals, together with cuneiform inscriptions—the latter white in colour on a blue ground. According to M. Fresnel, the chief of the expedition, these bricks afford a strong proof that the ruins are those of the palace of Nebuchadnezzar, inasmuch as the ornaments on them appear to be sporting subjects, such as are described by Ctesias and Diodorus. The foundations having been dug down to in certain parts, it has been ascertained that they are formed of bricks about a foot square, united by strong cement, and they are in blocks, as if they had been rapped in all directions. In a tumulus called Amran, to the south of Kasr, interesting discoveries have also been made. They appear to be the ruins of the dependencies of the palace situated on the left bank of the Euphrates; and they contain numerous sarcophagi, in which were found skeletons clothed in a sort of armour, and crowns of gold on their heads. When touched, the skeletons, with the exception of some parts of the skulls, fell into dust; but the iron, though rusty, and the gold of the crowns, are in a fair state of preservation. M. Fresnel thinks that the dead in the sarcophagi were some of the soldiers of Alexander or Seleucus. The crowns are simple bands, with three leaves in the shape of laurel on one side, and three on the other. The leaves are very neatly executed. Beneath the bands are leaves of gold, which it is supposed covered the eyes. From the quantity of iron found in some of the coffins it appears that the bodies were entirely enveloped in it; and in one there is no iron but some ear-rings, a proof that it was occupied by a female. The sarcophagi are about two and three-quarter yards in length by between half and three-quarters of a yard wide, and are entirely formed of bricks united by mortar. In addition to all this, a tomb containing statuettes in marble or alabaster, of Juno, Venus, and a reclining figure wearing a Phrygian cap, together with some rings, ear-rings, and other articles of jewellery, has been found, as have also numerous statuettes, vases phials, articles of pottery, black stones, &c., &c., of Greek Persian, or Chaldean workmanship.—*Literary Gazette.*

A MAGNIFICENT EYE OF SCIENCE.

The Telescope recently procured for the Observatory at Ann Arbor, Michigan, is the third in size in the world. The object glass is thirteen inches in diameter. Few persons have a correct idea of the time, the toil

and the skill requisite to prepare one of these glasses. First, there are the manufactures of the rough disks. A mass of glass weighing about 800 lbs. is melted together. When in a state of perfect fusion, the furnace is walled up, and the whole is left to cool gradually. The cooling process occupies some two months. By this process the glass is annealed. Afterwards the furnace walls are removed. The entire mass is then fractured, the manner of doing this is a secret with the manufacturers; but it is accomplished in such a way that every piece is homogeneous in refractive power. The pieces are next softened by heat and pressed into moulds, giving disks of different size. The telescope-makers purchase these and grind them into the required thickness and lens-form. Two separate disks, one of crown, and the other of flint glass, are necessary to form an object glass. One of these is concave, the other convex. It is by the union of the two that the object glass is made achromatic. The grinding is a slow and most difficult process, as the utmost exactitude must be attained. First, the edge is ground to enable the maker to see whether the glass is clear and without air bubbles. It not unfrequently happens that many disks have to be rejected. When a very superior glass is finished, it is of great value. The twelve inch glass of the Cincinnati Observatory alone cost \$6,000. And so it is, that these great lidless eyes of science are carved and polished, and turned towards the upper deep, unravelling the mighty lace-work woven in the loom of God.—*Chicago Journal.*

RUINS OF THE ALEXANDRIAN LIBRARY.

It is stated in the London News, that Captain Newnham, an Admiralty agent on the Southampton station, who has just returned from Alexandria, visited, while there, the ruins of the Alexandrian Library. A large mound in Alexandria has been believed for ages to mark the spot where once stood the famous library which was burned by the Caliph Omar. This mound is now in process of removal, and splendid houses are to be built on its site.—While Capt. Newnham was there, an immense stone of blue granite was dug out, which weighed several tons, and is covered with apparently Coptic letters. The Captain was unable to take a tracing of these letters. Beneath the mound the remains of a building, something like a star fort, have been discovered, and masses of double columns—also signs of wells of water, and of places for heating. The brick work is of immense strength and thickness—the brick being not so thick as English ones, but longer and broader. An immense number of Arab boys and girls were engaged in carrying away the rubbish in baskets.—Capt. Newnham picked up many curiosities there, such as pieces of conglomerated brick, mortar and metal work, bearing evident marks of having been fused together by intense heat. The Captain learned in Egypt that the French savant who discovered the buried city of Socarah, beyond Grand Cairo, was picking up an immense number of treasures for transportation to France.

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