APPLETON'S NEW AMERICAN CYCLOPEDIA.

By the receipt of the fifteenth volume, we perceive that the large enterprise of publishing this work is moving on in spite of the war. As samples of the articles we make two extracts :-

TALENT.

This term was originally applied by the ancient Greeks to a balance for weighing, afterward to the substance weighed, and finally to the weight itself. In the system of weights in use the talent was of the highest denomination, and was equivalent to 50 minas, each of which was equal to 100 drachmas, and each of these to 6 oboli. The value of these weights remained constant in relation to each other, while that of the units of the measure varied in different times and in different places. The system of money being based upon the weight of silver, the names of the weights employed came to be used as money values, in the same way as the English pound originally represented a pound weight of silver. No coins, however, are known to have been made larger than the tetradrachma, and the mina and talent were moneys of account only. The talent, when spoken of by ancient Greek writers, and not otherwise designated, is understood to refer to the Attic talent, the weight of which has been calculated from ancient coins which have been preserved, and, according to Dr. Arbuthnot, was equal to 59 fbs. 11 ozs. 171 th gr. troy weight. Previous to the time of Solon, however, who lowered the standard of money, the weight of the talent was to that named as 100: 73. The value of the later talent has been estimated at about £198, or about \$958. The Euboic talent is generally rated as of the same value as the Attic; and the Romans reckoned the weight of each as equal to 80 Roman pounds. A talent of Ægina, which in very early times was a standard over the greater part of Greece, has been generally considered to have been in proportion to the Attic as 5 : 3. Various other talents are named by the ancient writers, the comparative values of which have been treated in the works of Böckh and of Hussey, in Gibbon's "Miscellaneous Works" (iii. 410), and in Dr. Arbuthnot's "Tables of Ancient Coins, Weights and Measures." The gold talent of the Greeks, or the Sicilian talent, which is the talent always meant in Homer, contained about a oz. and 71 gr. avoirdupois of gold, and is supposed to have been called talent from the value of the gold being equal to that of a talent of copper, the weight of which was 1,000 times as much. The talent (kikkar) of the Hebrews, frequently named in the Old Testament, was a weight equal to 93 fbs. 12 oz. avoirdupois. Its subdivisions were the manch or mina and the shekel, 100 of the latter making 1 mina and 80 minas a talent. Its value is rated at about \$1,500. TARANTULA.

This is a terrestrial hunting or wolf spider of Southern Europe. It is the largest of European spiders, measuring 11 to 2 inches in the length of the body; the color is ashy brown above, marked with gray on the thorax, and with triangular spots and curved streaks of black bordered with white on the abdomen; below saffron colored, with a transverse black band. It received its popular name from being common in the vicinity of Taranto in southern Italy; it makes no web, wandering for prey, which it runs down with great swiftness, and hiding in holes in the ground and crevices lined with its silk; there is one spiracle on each side, one pulmonary sac, and eight eyes; it is very active and fierce, and the females defend their eggs and young with self-sacrificing brave-Its bite was once considered highly poisonous, ry. producing the nervous febrile condition called tarantism, which was supposed to be curable only by dancing to lively music until the person fell exhausted; the extraordinary accounts of travelers in relation to the bite of this spider are mere fables. though in patients thus bitten it is well to combat the terrors of the imagination by the musical remedy which the popular belief regards as effectual. The L. Carolinensis (BOSC) is called tarantula in the

Southern States; it attains a length of 2 inches, with an extent of legs of 4; it is mouse colored above, with white sides and whitish dots and lines on the abdomen; below blackish; legs whitish tipped with black. It makes deep excavations in the ground, which it lines with silk; the females carry their young on the back, giving them a hideous appearance, as if covered with warts ; the young run off in all directions if the mother be disturbed. Its poison is active, and might cause troublesome symptoms in man if the fangs could be opened at an angle proper to pierce his skin.

BROWN'S LAMP CHIMNEY.

The primary object of the invention here illustra ted is the production of a lamp chimney which will not be broken by a draft of cold air, or any other sudden change of temperature, while there is secured



an incidental advantage of no small importance material reduction in the hight of the chimney, thus making the lamp far more convenient for carrying about the house.

The principle from which the inventor started is that the upper portion of the chimney is more highly heated than the lower portion, and that when the



chimney thus unequally heated is encountered by a draft of cold air, the unequal contraction causes a fracture. This he proposes to overcome by the simple device of making the upper portion of the chimney of metal; the walls of the glass chimney having such position in relation to the flame that they will be heated alike in all parts, and will consequently contract alike on being cooled.

Fig. 1 of the engravings is a perspective view of a mp with the chimney attached, and Fig. 2 is a section of the chimney supporting a small paper shade. The short glass chimney, A, has a bead formed around its upper end to support and hold the metal-lic top, B. The paper shade, C, may be attached by metal clasps, dd; and as the metal top is itself a a shade as far as it goes, the paper shade may be very small.

We have seen a lamp burning with this chimney, and it makes a clear, steady, and beautiful light.

The patent for this invention was granted March 25, 1862, and a patent in England has also been procured through the Scientific American Patent Agency. Further information in relation to it may be obtained by addressing the inventor, Harvey Brown, at 121 Nassau street, New York. [See advertisement on another page.]



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The SCIENTIFIC AMERICAN is indispensable to every inventor, as inotonly contains illustrated descriptions of nearly all the best inven-ions as they come, but each number contains an Official List of the Claimsof all the Patents issued from the United States Patent Office during the week previous; thus giving a correct history of the progress of inventions in this country. We are also receiving, every week, the bestscientific journals of Great Britain, France and Germany; thus placing in our possession all that is transpiring in mecaanical science and art in these old countries. We shall continue to transfer to our mns copious extracts from these journals of whatever we may deem of interest to our readers

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