## THE CHIMNEY.

As we Britons are housed and artificially accommodated, in these days of civilization and refinement, we can hardly conceive that a city, town, village, or hamlet could, at any period, have been built without the convenience of a single chimney. Yet neither Greek nor Roman had this convenience to his house. Caminus, however, has been translated as signifying a chimney; but, according to Beckman, it rather means a metallurgic furnace, in which a crucible was placed for melting and refining metals. Besides this, it would seem to have had other significations. One of these was a Smith's forge; and another, a hearth or a fire-place which served to warm the apartment, in which it was constructed. For this purpose, portable stoves in fire-pans were also used, and were filled with burning coals, or wood was lighted in them and when reduced to charcoal, carried into the apartments. These, however, must have been very inconvenient and troublesome modes of obtaining warmth; and it surprises us, that the inventive genius of two such nations as the Greeks and Romans, did not devise such a simple thing as a a common flue, to carry off one of the most disagreeable nuisances that can possibly afflict the inmates of a dwelling. In every apartment of a Roman house the smoke was blown about in windy weather. Everything was blackened by it, so that Vitruvius, in speaking of ornamenting and fitting up apartments, expressly says that there ought to be no mouldings or carved work, but all should be as plain as possible in those rooms in which fire is made, or many lights burned. The reason for this is because of the soot. The imagines majorum, or images of their ancestors, although placed in niches in the atrium or hall, in the houses of the great, were covered with it, and on that account were called fumosæ. In the dwellings of the rich, no doubt, care was taken to keep these as clean as possible; but in the houses of even the middle classes, the smoke prevailed to such an extent, that the ceilings and walls were incrusted with soot. How uncomfortable, then, must have been the habitations of the Greeks and the Romans—the classics of antiquity-when compared with those of the British! We can imagine the rheum running from the eyes of Cæsar, notwithstanding his unquestionable greatness as a man, and his mightiness as an Emperor. We can even hear the complaint of Horace, when the smoke had brought the water into his eyes in the inn at which he had happened to stop for refreshment, on a journey; and had the Nymphæ been mortal, as some mythologists think they were, and dwelt in houses instead of woods and caverns, and evergreen grottos, doubtless their lovely tresses would have sometimes smelt of the smoke which wreathed itself so abundantly amongst those of the fairest women of the Grecian and Roman capitals.

The history of the chimney is a very curious piece of archaelogical antiquarianism. Not many years ago, we ourselves, in a tour in Scotland, were eye-witnesses of the smoke making its way through a hole in the roof, in several cottages not many miles to the north-west of Stirling. This is the most primitive mode by which the fire-wood fumes of antiquity made their escape from the

dwelling house. It was the Greek as well as the Roman mode; and was also adopted by other nations, no doubt, before even these had a name or an existence. In a Roman abode, the atrium was long the principal apartment. "It was generally more spacious than any other," says Ramsay in his "Roman Antiquity," "and existed, in some shape, in every mansion, great or small, from the earliest down to the latest times. It was always placed opposite the principal entrance, and was, in the great majority of cases, lighted by an aper-ture in the centre of the ceiling, open to the sky which was called impluvium, because the surrounding roof sloped towards it so as to conduct the rain down into a reservoir called compluvium, formed in the pavement below for its reception. The atrium was originally the public room, open to all members of the family, to friends and to visitors. the middle was placed the fire-place of the house (focus) where all culinary operations were conducted, the smoke escaping through the impluvium above."

Not until, perhaps, about the fourteenth century was a real chimney seen in England. Previous to this, the dwellings of even the opulent must have been miserable places, in so far as regards domestic comfort, when compared with that which is usually uppermost in the modern mind. In the middle of the spacious halls of our ancestors was placed the hearth, upon which stood the and-irons, where horizontally lay the ends of the brands, which by means of a heavy two-pronged fork, were arranged, in the best form, for throwing out light and heat. On the roof, over the hearth, was a turret or tower, filled with boards, disposed in such a manner, as to exclude the wind and rain, and allow the smoke to "In this guant and aguish apartment," says a writer on this subject, "heated by a single fire, the company were in a position not much different from what they would be in the open air. Light was the only solace the greater number could derive from the blazing fuel; and the few who were in a situation to feel the radiant heat, were incommoded by the current of cold air, sweeping like a hurricane, along the floor towards the fire. From the height of the louver, and low temperature of the smoke, few of the buoyant flakes of charcoal found their way into the atmosphere, and the larger the bon-fire the thicker was the layer of soot deposited upon each individual. Boisterous wea-Had the fire ther, also, brought its annoyance. been made in an open field, they might have moved to the windward of the smoke; but in the hall where could they flee from its miseries?" As it was with our ancestors before the invention of chimneys, so was it with the Greeks and Romans, who, with all their arts and learning, their fine minds, elegant tastes, lofty idealism, and beautiful forms and faces, must have presented but indifferently cleanly exteriors, after having been exposed a while to the smoke of their own dwellings.

That chimneys, however, are very ancient, cannot be doubted. DuCange, with Vossius and others, assert that apartments called caminata had chimneys, and that word appears as early as 1069. The sense in which it is used, however, is not clear. Beckman thinks that it is proved that there were chimneys in the tenth, twelfth, and thirteenth centuries, by the use of the curfew-bell of the English and the couvre feu of the French. The oldest