

Association in a lecture. Your reply that you have the use of the Hall only on Sunday evening, at a time I am otherwise employed, renders needless further correspondence on that point.

Your invitation to a discussion is respectively declined, for the very good reason that I never have advocated the proposition that, "The world owes its civilization to the religion of Christ." You certainly did not expect me to affirm it, for no sane person believes it. My position was that "The religion of Christ, as taught in the New Testament, was and is, the originating and controlling cause of the political, social, domestic, intellectual, moral and religious superiority of Christian civilization over all other civilizations." There is a wide difference between the propositions.

Again, I am accustomed to being paid for my labor, and not to paying for the privilege of working. You certainly did not expect me to abandon work for which I am paid, lose my time, and pay for the privilege of working. There are other reasons, but these are sufficient reasons for declining your invitation.

Respectively yours,  
CLARK BRADEN.

### PRE-HISTORIC TIMES.\*

TRANSCRIBED FROM THE SHORT-HAND MAGAZINE.

BY JOHN T. HAWKE.

Half a century ago, if an antiquarian had been asked where the most ancient monuments and remains of the human race were to be found, he would unhesitatingly have referred his questioner to Egypt and the East. Nowadays the seeker after archeological information would receive an answer of a very different character. He would be told that he could prosecute his researches without even crossing the Channel, because on the banks of familiar English rivers, and within the boundaries of commonplace English villages he would find undoubtable traces of human habitations reaching up to an epoch so remote that compared with those primitive children of Albion, the shepherd kings of Egypt are as men of yesterday. It is almost ludicrous to contemplate the position of some archeological enthusiast of the last generation poring painfully over a coin, reverencing it for its extreme antiquity—a paltry two thousand years or so—while all the while beneath his very feet there lay buried the emblems of a race of men who had seen *hippopotamii* basking in the mud of the Thames, who had tracked the stately mammoth to his lair in Epping Forest; and had hunted the wool-haired rhinoceros on Black-heath.

Sir John Lubbock classifies the annals of pre-historic men in four leading divisions—first, the paleolithic or old Stone Age. The emblems of this period are rude and unpolished; no traces of metal are discernable; and the climatic conditions of Europe varied considerably from those now prevailing, as is shown by the existence of animals unsuited to the present temperatures, and which have since become extinct. To this and the succeeding epochs a very high degree of antiquity must be assigned, considerably transcending the ordinary mundane chronology. Second, The neolithic, or new Stone Age, exhibits an advance in civilization. Many of the weapons and instruments, of this period are beautifully made, but no metal appears to have been known, excepting gold, which was sparingly used for ornamental purposes. Third; next in order comes the Bronze Age, in which bronze, a compound of copper and tin, was used for arms and cutting implements of all kinds. Fourth, In the Iron Age, bronze had been superseded by iron for cutting purposes. This period is distinguished from its predecessors, not merely by the use of iron, but by other tokens of advancing civilization. Silver and lead were in use, letters had been invented, and coins struck.

It will be easily understood that these several eras are not separated from each other by any hard and fast line of demarcation; on the contrary, they overlap and intermingle. Human nature is

too conservative to allow an old contrivance to be readily vanquished by a new invention. Bows and arrows were in vogue long after the discovery of gunpowder; steam vessels have not yet succeeded in drivingsailing ships from the sea, and so stone and bronze implements were in use during the age of iron. And as we do not know when these transitional stages of human progress began, so neither can we say when they respectively terminated. In fact, there are savage tribes, such as the Andaman Islanders, which are still in the Stone Age.

The Iron Age can hardly be regarded as pre-historic, for in the countries—Demerara for example—it is reckoned not to have set in till after the commencement of the Christian era. Sir John Lubbock, who prefers to trace our pre-historic annals in an upward direction towards their source dwells very briefly on the Iron Age, which on account of its comparative modernness, is less interesting than its predecessors, but he affords a conclusive proof, that the Age of Bronze superseded the Age of Iron. Some men ask, how it came to pass that the men of the Bronze Age preferred copper to iron, seeing that iron is a far commoner metal, and much better adapted to cutting purposes. The answer is, that iron being almost invariably found in the form of ore, would not readily attract the observation of ignorant persons; while copper is found often in a native condition, its ores are striking to the eye, and it would be much more amenable to the efforts of a primitive hammer-man. We may observe that the word "brass" which occurs thirty-eight times in the Pentateuch should be translated "bronze," brass being a compound of copper and zinc, an alloy unknown to the ancients. The difficulty is to decide where the primitive people got their tin from. Some have supposed that they used a compound ore containing both copper and tin. Unfortunately this convenient theory is opposed by the fact that such ores are extremely rare, and that they cannot be assimilated so as to form a metallic compound. We are therefore driven to the conclusion that the bronze men obtained their tin from Cornwall, the only tin mine in the world of any importance, except that found in the island of Banca in the Indian Archipelago. Sir J. Lubbock supports this view, believing that the knowledge of bronze was introduced into Europe from the East, and that the Phoenicians were the purveyors of tin from the Cornwall mines. This supposition opens up a very interesting view of European commerce at a period certainly *not later than* 1200 B. C. We may be sure that the Phoenicians did not undertake that perilous voyage to the Lizard Point for nothing; but that they charged a pretty high price for their merchandise. What did they take in exchange from the Irishmen, the Swiss, and the Danes; and how was the imported tin introduced into an inland country like Switzerland? So much locomotion and intercommunication implies a high degree of civilization; for the savage races of modern times can show nothing of the sort, and yet judging by relics they have left behind them, these bronze men were no further advanced than some of our modern savages. The only way of escaping from the difficulty is by supposing that all the civilization belonged to the Phoenicians; that they had their charter parties, and bills of lading, and energetic commercial men who waded through the Irish bogs, and scaled Alpine ranges for the sake of doing business, while their customers bore the same relation to them that an Ashantee chief bears to the Liverpool skipper who buys his palm oil in exchange for gunpowder and Manchester prints.

The chapter devoted to American Antiquities will be read with great interest by Europeans. Americans need no longer allege that they must visit Europe in order to see the ruins of former ages, for their own country teems with monuments of the past. These antiquities may be arranged in two great divisions—implements (including ornaments) and earthworks. The bone and stone implements closely resemble those of Europe, while the metallic implements consist of almost pure copper. In Minnesota an ancient copper mine was discovered, consisting of external excavations, often twenty-five or thirty feet deep, and extending over an area of several miles. In these shafts the stone mauls and hammers of the primitive workmen were found, and more than one generation of gigantic forest trees had found time to flourish and decay upon the mounds produced by the rubbish thrown up from them.

\* This extract has been transcribed from an abridgement in Phonographic Short hand, of a review which appeared in the London Times of Sir John Lubbock's celebrated work, entitled, "Pre-historic Times."—J. T. H.