

MONDAY, JUNE 25TH, 1855.

THOMAS ROMNEY ROBINSON, D.D., PRESIDENT,
in the Chair.

HIS EXCELLENCY THE EARL OF CARLISLE, Lord Lieutenant,
attended the meeting.

On the recommendation of the Council, it was Resolved to place £50 at the disposal of the Council, for the purchase of Antiquities.

George Petrie, LL.D., read an account of the ancient shrine or cover of the Gospels of St. Molaise.

J. F. Waller, LL.D., read a paper on the revival of Italian literature in the fourteenth century, especially in relation to Dante, Petrarch, and Boccaccio.

Robert Mallet, Esq., read a paper on the bursting of ordnance when firing heated shot.

The Rev. Dr. Todd read the following paper by the Rev. Dr. Hincks on certain animals mentioned in the Assyrian inscriptions:—

“It may be questioned whether there be any two branches of human knowledge between which it would be safe to say that no connecting link could possibly exist. It is, at all events, certain, that studies which appear at the first glance to have nothing in common, have been often found capable of rendering valuable assistance to one another. And it is no small advantage that a society like the Royal Irish Academy possesses, the meetings of which are attended by persons who are engaged in all manner of dissimilar investigations,

that they who have applied themselves to the extension of one branch of knowledge may not only be encouraged to carry forward their exertions by the approbation of those who have applied themselves to other branches, but may occasionally derive from them valuable assistance.

“The decipherment and the interpretation of records contained in a lost language seem at first to have no possible connexion with zoology; and yet the names of animals may occur in those records, and statements may be made concerning them, which may perhaps enable the zoologist to say which of the animals now existing in the country spoken of were designated by these names; or, it may be, to pronounce that animals must have existed there formerly, which are now no longer to be met with—even as the wolf and the beaver have disappeared from the Fauna of Great Britain, and the dodo from its last dwelling-place in the entire earth.

“In the present paper I propose to treat of the animals mentioned in the Assyrian inscriptions; and I hope that the knowledge of zoology possessed by some of those who may hear it read will enable them to throw light on points which mere philological research has left in obscurity.

“There is much greater difficulty in determining what animals were designated by Assyrian names than by Egyptian ones; and that for two reasons. The Egyptian sculptures present to us many representations of animals, with their hieroglyphical names over or beside them. When these names, therefore, are met with in ordinary Egyptian texts, it is known what animals they denote, even if no representation of the animal should follow its name; which, however, it very frequently does. On the other hand, the few determinatives which accompany the Assyrian names of animals bear no resemblance to them; and, consequently, do not indicate at all what the animals were. The Assyrian sculptures also very seldom contain representations of animals, accompanied by names which we can feel certain of belonging to them. In

fact, the sculptures which surmount, or intervene between the parts of a column of Assyrian writing are wholly independent of that writing; having as little relation to its contents in ordinary instances, as the illuminations of the capital letters in a mediæval manuscript have to the passages which those letters commence.

“The obelisk first found at Nimrûd, which is now in the British Museum, contains several representations of animals, the names of three of which are certain. There is an elephant called *alab*, or *alap*; a name which is perhaps compounded of the Arabic article and the Egyptian *abu*, the Latin *abur*, and the Sanscrit *ibhas*, as Benary thought that the Greek ἐλέφας was compounded; but I incline to the opinion of Ewald and Rödiger that the Hebrew word for elephants, אֵילִם, *habbim*, stands for *halbim*, of which *halab* would be the singular. The Assyrians had no means of distinguishing *halab* and *alab*. This word has been connected by Ewald with the Sanscrit *kalabhas*, which also signifies an elephant: the *as* in this word is the nominative termination.

“Camels with two humps are figured on the same obelisk in two places; and they are in both instances called ‘*habba* whose humps are double.’ The word *habba* has a determinative character prefixed to it, which appears to denote beasts of burden; it is placed before the names of all animals of the horse kind. I believe that *habba* stands for *halba*; just as the Hebrew *habbim*, according to Ewald, stands for *halbim*; that it is the plural of *halab*; and that this word, when it stands alone, signifies an elephant; while the determinative of beasts of burden prefixed to it gives it the sense of camel. The *halab* in this secondary sense was the dromedary, or Arabian camel; and when the Bactrian camel was spoken of, the explanatory words above mentioned, ‘whose humps are double,’ were required to be added. This was, however, not the only Assyrian word for the camel. In different copies of the inscription of Sargon, in which he records the tribute or pre-

sent made to him in his seventh year by the King of Egypt, the Queen of Arabia, and the Amir of Sabæa, the word *habba*, with the determinative prefix already mentioned, is interchanged with *gammal*; and the latter word frequently occurs in other inscriptions. It is obviously of the same origin with the Hebrew and Arabic word from which, through the Greek and Latin, our own word ‘camel’ is derived. The only other animal represented on the obelisk, both the name and the figure of which I have been able to ascertain, is the horse. The Assyrian name of this animal consisted of two characters preceded by the same determinative as that in the name of the camel. The first of these has several different values. It might be read *kurra*, but I think the most probable reading is *satra*. To this would correspond a Hebrew, Aramæan, or Arabic word, *hatar*; for in all these languages *ha*, *hi*, and *hu* correspond in the pronominal forms and the verbal performatives to *sa*, *si*, and *su*, of the Assyrian. I am not aware that this word occurs in any existing writing in any of the languages I have mentioned; but it is the Egyptian word for ‘horse;’ and the Egyptians certainly obtained this animal from their Asiatic neighbours, from whom they, no doubt, took its name also. It is an established fact that horses are never figured, or even mentioned, in the earlier Egyptian inscriptions. We have, therefore, strong presumptive evidence that in some of the dialects of Palestine, long prior to the Exodus, and indeed to Jacob’s descent into Egypt, the name *hatar* must have been applied to the horse; and this leads me to prefer *satra* to every other possible reading of the Assyrian word.

“The word for ‘horse’ being known, that of another word which is never met with but immediately after it, and in intimate connexion with it, immediately follows. It necessarily signifies ‘mares.’ To establish this, I need only cite a single passage. In the 16th line of Bellino’s cylinder, Sennacherib speaks of having taken ‘208,000 men and women,

7200 horses and mares.' It can mean nothing else. The name consists of the same determinative sign as before, followed by characters which I read *susim*, or *susiw*. The reading of the last syllable is uncertain; but I connect the word with the Egyptian *sesem*, which agrees both in its signification and in its radical letters. The relation of the word to the Hebrew סוס, *sûs*, appears to me doubtful, though an attempt has been made to connect them. The last radical of the Assyrian and Egyptian words is wanting in the Hebrew; the latter language does not assign to *sûs* a feminine signification; and I am by no means certain that the Hebrew *Samekh* is ever represented by the Assyrian *s*.

“In two passages on Bellino’s cylinder, we have four animals in sequence, the first, second, and fourth of which are the horse, the mare, and the camel: all whose names are preceded by the determinative already spoken of; while the third is represented by this determinative alone. In the passage in the sixteenth line, where 7200 horses and mares are said to have been taken, 11,112 of this third animal and 5230 camels were taken. I cannot think of any animal but the ass, which this ideograph can represent. This was the beast of burden first used, and, therefore, likely to have been symbolically represented, and to have had its symbol prefixed to the names of other beasts of burden; and it could scarcely have been omitted from a list of captured animals, which, however, it would have been if this ideograph did not express it. I regard the value of the character as denoting ‘an ass’ nearly certain; but I am uncertain how it was pronounced. A fourth word, to which this character is prefixed as a determinative, occurs in an inscription of Tiglath-pileser II., the contemporary of Menahem and Rezin (B. M. 68. 2). The word is *ana-qâtîñ*, which occurs in the second Targum of Esther, i. 2, with the meaning, ‘she camels.’ There can be no doubt that this is the meaning here, as the determinative of females precedes that of beasts of burden, and as the word *habba*, ‘camels,’

stands next before it. A fifth word, preceded by the same determinative, follows, which necessarily signifies either a foal generally, or the foal of a camel in particular. The second character in the word is different in two different copies of the inscription, and neither copy appears to be correct. This renders doubtful the second consonant in the word. I read it *zukkari*, taking it for a puhal form of the root *zakar*, ‘to beget;’ a signification of the root which has hitherto been considered doubtful, but which the word before us seems to confirm. The passage in the inscription terminates a sentence in this manner:—‘Oxen and sheep, camels, she camels with their foals, I received.’

“A seventh word to which this determinative is prefixed is *parrin*, which occurs in the seventh line of the inscription on Bellino’s cylinder, where the booty abandoned by the Babylonians, and captured by the Assyrians on the actual field of battle, is mentioned. It consisted of chariots, waggons, horses, mares, asses, camels and *parrin*, which I take to be put for *pardin*, and to signify ‘mules.’ The Assyrians assimilated adjoining consonants to a very great extent; and when we find *anna* for *anka*, ‘tin’ or ‘lead,’ and *gallu* for *gadlu*, ‘great,’ we cannot be surprised at *parrin* for *pardin*. Mules are frequently represented in Assyrian sculptures.

“An eighth word occurs in a fragment of the Annals of Tiglath-pileser II. (B. M. 52, 2nd part, 11). We have here ‘horses, *pariin*, oxen,’ &c., enumerated as a tribute or spoil. It is possible that this may be a modification of the preceding word; but I rather think it means ‘asses,’ corresponding to another Hebrew word *pere*, פֶּרֶה.

“In the sculptures from the North-west Palace at Nimrûd the Assyrian king is represented hunting and killing wild bulls and lions. In the pavement inscription from the same palace, where he relates his exploits, he says that he killed forty of one kind of animals, and took eight alive; of another he killed twenty, and took twenty alive. The name of the first kind

begins with a character, which, when it stands alone, is very commonly used in the inscriptions. It occurs as part of the booty taken from the different conquered nations, following horses, when these are mentioned, which it always exceeds in number; while it is taken in much smaller numbers than another animal which follows it. I cannot doubt that this character signifies 'an ox;' and it seems to be prefixed as a determinative to the following character *av*, which may signify 'a buffalo,' or 'wild bull.' A similar word, determined by the figure of an ox, occurs in the Egyptian inscriptions. Its precise signification has not been ascertained; Mr. Birch, in the vocabulary given in Bunsen's work, interprets it as 'a cow;' but there was another word in common use, of which this was certainly the signification.

"An obelisk which has been lately brought to the British Museum belonged, I believe, to the same king, the builder of the North-west Palace. I have only seen a rubbing of one of its sides. In it, the word which I have translated 'buffaloes' occurs without the determinative sign. The king says that he killed all those on Harajiq, and on the sides of Lebanon, that were of larger size, carrying away their calves, and (if I be right in interpreting the next word according to the Arabic) keeping their females in confinement. Though I think there is good reason to think that this animal was a buffalo or bison, it is never used to express any of the stone objects which the Assyrian kings erected at their gates. The word for 'bull' must have been different.

"The determinative of this word, which, when it stands alone, signifies oxen generically, is followed by different groups, all of which must signify 'sheep, goats,' or these two kinds of animals in common. Sometimes a word stands alone, which is evidently the Hebrew קֶבֶץ , 'a flock,' though the vowels are different from those expressed by the Masoretic punctuation. To this a determinative is generally, though not always prefixed; namely, the character which has the phonetic value *lu*. I take

this word, with or without the determinative, to signify 'sheep and goats,' including both species. The determinative, however it was read, when it stands alone, seems to signify sheep; and another word, the plural of which is often joined with its plural, probably signifies 'goats.' In the pavement inscription at Nimrûd, this pair of words seems used as equivalent to *chi-ini*, 𐎠𐎢𐎽.

"The word which I interpret lion consists of three characters, whose ordinary values are *mal*, *sir*, and *hhu*. It may be considered as certain that all these are not their values in this group; but I have no idea how the Assyrian group should be read. It is probable, however, that some among the tablets of interpretation that are in the British Museum may solve this enigma.

"I believe that 'bull' is denoted by a group of which the ordinary values of the characters would be *ur* and *makh*. The first of these seems to be a determinative, and the second has very probably some other value in this combination.

"Other animals are mentioned, on which I do not feel that I can throw any light. I confine myself to two, which it requires more knowledge of natural history than I possess to identify.

"The first is named the *nakhir*, which, according to the Hebrew value of the root, would signify 'the snorter.' It is mentioned three times in the Assyrian inscriptions that I have seen, and in three different connexions; but they are all in inscriptions of the same king, the builder of the North-west palace at Nimrûd. At the end of the tribute of the maritime cities of Syria, Tyre, Sidon, Gubal, &c., he mentions 'teeth or tusks of the *nakhiriñ*, the produce of the sea.' He says, 'that he embarked in ships of the Arvadites, and killed the *nakhir* in the great sea.' The noun is here in the accusative singular definite, which would seem to imply great rarity. He speaks of the *nakhir* much in the same way as the Americans speak of 'the sea serpent.' Lastly, he speaks of setting up

at the gates of a palace (at Kaleh Shergât, as I believe) two Nakhiriñ, along with six bulls of stone, and other objects of different kinds of stone. It would seem from this that it was not stone representations of these sea monsters which he set up, but the skeletons of the actual animals; for it is scarcely credible that their skins were preserved. Now what cetaceous animal, or fish, could be found in the Levant, which would satisfy these statements?

“The other animal to which I wish to draw attention is one which is very frequently mentioned; and I am inclined to identify it with the reem of the Bible, and to suppose that it represents a species which does not now exist. At any rate, I think it cannot have been any of the animals which are now living in Syria.

“The name is composed of two characters, which it would be most natural to read *amtsi*. I, however, distrust this reading, and suspect that one of the characters, or the combination of the two, had some different value, which may perhaps be learned from a tablet.

“These animals are repeatedly named in the inscriptions, where the tributes of the different nations are mentioned. Their teeth or tusks (as I interpret the word which generally precedes them, and which is also used of the *nakhir*) were given by many people, and especially by those in Syria. Among the spoils which Esarhaddon took from the King of Sidon, he mentions skins of *amtsi* as well as teeth of *amtsi*. These teeth were also used in ornamenting chariots and other objects, and a kind of wood is mentioned which was used along with them for this purpose. Looking to similar passages in the Egyptian inscriptions, it is natural to translate these terms by ‘ivory and ebony.’ These animals, whatever they were, lived in Syria, as appears not only from their skins and teeth being given in tribute from the countries there, but because the King of Assyria is mentioned as killing them there. After the account of his killing the *nakhir* in the great sea, and the

buffaloes, he proceeds : ‘ He slaughtered amtsi with his arrows. The amtsi that survived he captured and brought to his city Assur.’ In another inscription he speaks of killing thirty amtsi ; a preposition and noun follow, the signification of which are doubtful. I think the root is ישב, *yashab*, to sit or dwell ; but whether the king means to say that he killed them from an ambush, or that they were at rest when he attacked them, I cannot say ; nor indeed am I very certain that the root is what I have stated. In the same passage where these thirty amtsi are mentioned, he speaks of killing 257 of what I have translated buffaloes, with arrows, while driving in his chariot, and also 360 bulls with a weapon, which I suspect to have been the boomerang. From this it appears that the amtsi were, comparatively speaking, rare.

“ I feel that an apology is due to the Academy for offering a paper on a subject on which I possess such imperfect knowledge. Still, however, it may prove interesting to some ; and it may elicit observations from naturalists that may throw light on what I leave in obscurity.”

Sir William R. Hamilton read a continuation of his Paper on some new geometrical applications of quaternions.