

#### IV.

EXHIBITION AND DESCRIPTION OF A COLLECTION OF STONE AND OTHER REMAINS FROM SWISS LAKE DWELLINGS, ILLUSTRATIVE OF THE AGRICULTURE, MANUFACTURES, ETC., OF THE LAKE DWELLERS. BY THE HON. LORD ROSEHILL, F.S.A. Scot.

In describing this interesting collection, which was exhibited on the large table in the library, Lord Rosehill said,—Having been requested to exhibit a few specimens belonging to a small typical collection, got together by myself last summer, of remains from the Swiss Lake-dwellings of the Stone Age, and there being already a collection, or rather the foundation for a collection, of these interesting remains in this Museum, I have brought up here to-night only a few of those objects which I see are not yet represented in the Museum, and which, therefore, may be of some interest to those present who may not have seen the more perfect collections in the British Museum and elsewhere. The discovery, the geographical position, and the general character of these Swiss Pile-dwellings are so well known, that I propose only to make a few remarks in explanation of the objects exhibited, merely mentioning that my researches were confined to those of the earliest or pure Stone Age, or those in which no traces of worked metal in any form have been hitherto discovered.

My comparative success in one, at least, of the objects of my Swiss trip, I owe entirely to the hints, instructions, and introductions obtained from several members of this Society, amongst whom I may mention, Mr Stuart, Sir James Simpson, Mr Albert Way, Professor Keller of Zurich, and other gentlemen.

The specimens on the table will be found to have come chiefly from Moosseedorf, near Berne; Robenhausen, perhaps the most interesting of all the settlements; Himerick, and another village on the Lake of Pfäffikon, and Wangen, on the Lake of Constance, all of the Stone Age; besides a few from Concise and Meilan, settlements of the Transition period.

The flint arrow-heads, which are all I was able to obtain, are, for the most part, rudely made and imperfect; with them are a few dart-heads of the same class. The flint knives and saws are also of the most primitive description, with rudely dentated edges. On the other hand, the stone axes show traces of considerable labour and skill. The few I have brought here to-night may serve as types. The axe in stag's-horn hafting is the only one I possess which was found at all entire. Though, even in this case, the bitumen which held it in its place had disappeared, still the position in which the two parts were found leave no doubt but that they originally belonged to each other; and a small chisel will also be seen, which is still firmly fixed in its handle.

The most interesting form of implement, to my mind, is that of the so-called "scraper," from the surprising similarity of shape and workmanship in specimens from all countries, and of all ages.

To exemplify this, I have placed together one specimen of the Palæolithic or drift type, one from the *kjökkenmöddings* or shell mounds of Denmark, and one each from England, Scotland, and Ireland. If these are compared with those from the Swiss lake-dwellings, the likeness will be at once noticed. Others are to be seen in this Museum from various countries. I have seen precisely the same shape in America, they have been found in Africa, and to this day several savage nations are said to use a stone implement identically the same in the dressing of skins.

The three grinding-stones produced show well the phases through which a stone axe passed, before being brought by use, of the finest grained one, to the final polish. The way in which a stone selected for any particular

purpose was cut through—probably simply by the use of a flint saw, aided by fine sand and water—is shown in several specimens.

I have read—but where I cannot remember—the account of a similar process as carried on by some savage nation at the present day, in which the stone to be cut was suspended by a rope from the branch of a tree, and was passed backwards and forwards, like the pendulum of a clock, over the edge of the saw or cutting instrument fixed below it. Thus the weight of the stone helped it to do its own work, and would take far less labour than the alternative of working a small flint by force into the stone. Whether any such plan was adopted here I know not; but the concave form of most of the cuts in stones I have noticed, seems to warrant some such idea.

A well-formed stone implement (S. No. 117) is a curious specimen. I have only seen one like it, which was in the collection at Zurich. It is perforated, and seems to have been worn about the person attached to a string; but for what purpose it is difficult to conjecture. A fragment of a perforated and rounded stone, of the class supposed by many to have been used in some game of skill resembling our “quoits,” and a few other specimens of less importance, and the list, so far as stones and flints are concerned—corn-crushers, mealing-stones, whet-stones, and the like—being well represented in the Museum, I need not dwell upon them.

The articles of worked bone consist chiefly of two classes, viz., the pointed and the chisel-shaped implements. The former vary from small needles or hair pins to a size which would suggest their use as weapons of defence. The chisels vary also, not only in size, but in the shape of the edges, which are square, round, hollow, or oblique, and seem to have been used for many different purposes. After these, the most common are the handles or haftings of stag's-horn. I have brought a selection to show. The celt haftings have been clearly fastened again into a handle or shaft of wood. Some of the chisel haftings have evidently been double—a stone chisel being fixed at each end; and those in which flint knives or saws were fixed I am unable to represent, except by one specimen preserved in spirits of wine.

The three bone arrow-heads shown are somewhat uncommon, as are also the bone axe-heads; and there is great doubt whether the latter were

not mere symbols, or, perhaps, the toys and sham weapons of children. The bone knives are very common, and seem to have been brought to a cutting edge by grinding, or by notching like the flint saws. The fish-hook, made, I think, out of part of a boar's tusk, is perhaps the most curious and interesting object I have in my collection, and a few other small objects, with the perforated teeth, used as ornaments, may be thought worth examining. There are also heckles for combing flax, and netting needles, &c.

In wood the principal objects are part of a bow of yew, a scraper, of much the same shape as those of stone, and some handles for celts and knives. Those not preserved in spirits having shrunk almost out of all form whilst drying.

With regard to earthenware and pottery, I have collected as many fragments as I could, showing the different kinds of marking and ornamentation. The earthenware is all very coarse, and evidently hand-made; and the markings have been produced with the aid, sometimes of the finger-nail, and at others of pointed or blunt implements of bone. I have more perfect ones at home, but being plain and unmarked, they are probably less interesting than these fragments. Spindle-whorls, cones, and perforated clay weights and balls, &c., are, I think, represented in the Museum, so I have not brought any here.

I now come to the last division, namely, vegetable remains and manufactures. The latter consists of some pieces of coarse cloth; several skeins, hanks, and knots of thread of different twists, part of a fishing net, and some plaits of bast. These must speak for themselves, as, with one or two exceptions, I did not find them myself. However, I think I can vouch for their being genuine, and they go far to show that in Switzerland the master mind of man had invented and made use of certain mechanical contrivances to aid him in supplying his wants, even before the first idea of the advantage to be derived from the use of any kind of metal reached him from more civilised lands.

The collection of seeds in small glass bottles are of some interest, and those from Robenhausen were chiefly picked out, by my wife and a friend, with tweezers from the mud, as it was thrown up from the bottom of the excavation eight to twelve feet below the surface. A list of those I have is appended, and although there are still many wanting to make up the

full list of lake-dwelling plants and seeds as given by Professor Keller, still there are enough for comparison, and I hope yet to get the rest.

(Brief reference was made to the specimens exhibited of carbonised grain in lumps and in ears, burnt apples and pears, evidently cut in two, dried, and put aside for winter use; bread, coarsely ground and roasted, nuts, fish-scales, &c., burnt straw or thatch, grass and moss for bedding, tinder, fungus, &c.)

LIST OF PLANTS OF THE SWISS LAKE DWELLINGS CHIEFLY COLLECTED IN  
THE SEED BY LADY ROSEHILL FROM ROBENHAUSEN.

CEREALS—

*Hordeum hexastichon sanctum*—Lake-dwelling barley.

*Hordeum hexastichon densum*—Six-rowed barley.

*Triticum vulgare antiquorum*—Lake-dwelling wheat.

*Triticum turgidum*—Egyptian wheat.

*Triticum dicoccum*—“Emmer,” or two-grained wheat.

WEEDS OF THE CORN-FIELD—

*Lolium temulentum*—Darnel.

*Lychnis vespertina*—White campion.

*Silene cretica*—Cretan catchfly.

*Ranunculus repens*—Creeping crow-foot.

VEGETABLES—

*Pastinaca sativa*—Parsnip.

*Pisum sativum* (?)—Pea.

FRUIT AND BERRIES—

*Pyrus Malus* (2)—Apple.

*Prunus (avium)*—Cherry.

*Prunus spinosa*—Sloe.

*Prunus padus*—Bird-cherry.

*Rubus Idæus*—Raspberry.

*Rubus fruticosus*—Bramble.

*Rosa canina*—Dog-rose.

## NUTS—

- Corylus Avellana*—Hazel-nut (2).  
*Fagus sylvatica*—Beech.  
*Trapa natans*—Water-chestnut.  
*Papaver somniferum*—Poppy.  
*Linum angustifolium*—Flax.

## FOREST TREES AND SHRUBS—

- Pinus sylvestris*—Scots fir.  
*Pinus montana*—Pine.  
*Pinus Abies*—Spruce fir.  
*Pinus Picea*—Silver fir.  
*Taxus baccata*—Yew.  
*Quercus Robur*—Oak.  
*Carpinus Betulus*—Hornbeam.  
*Betula alba*—Birch.  
*Viscum album*—Mistletoe.

## MOSESSES, FERNS, AND FUNGI—

- Four varieties not yet named.  
*Polyporus igniarius*—Tinder fungus.

## WATER AND MARSH PLANTS—

- Scheuchzeria palustris*—Marsh, S.  
*Iris Pseud-acorus*—Yellow flag.  
*Potamogeton (perfoliatum, &c.)*—Pond weeds.  
*Alisma Plantago*—Water plantain.  
*Galium palustre*—Marsh bed-straw.  
*Menyanthes trifoliata*—Buck-bean.  
*Pedicularis palustris*—Marsh louse-wort.  
*Hydrocotyle vulgaris*—Pennywort.  
*Nymphaea alba*—White water-lily.  
*Ranunculus aquatilis, &c.*—Water crow-foot. &c. &c.

Professor Sir JAMES Y. SIMPSON expressed the pleasure with which the members of the Society had listened to his Lordship's remarks in illus-

ration of the very valuable and interesting collection now exhibited, and said that it was a collection which was most meritorious to Lord Rosehill, and valuable in a scientific point of view. He remembered himself with what deep interest he had gone over the sites of those settlements of the stone age at Robenhausen, where he was told there were houses full of the remains of cloth, and others full of thread, showing that some progress had been made in manufactures; and as an indication of the dawn of the age of bronze, just about the period of the destruction of the settlement, a few crucibles made of clay and horse dung were found, wherein could be seen a few specks of melted bronze. The whole story of these lake dwellings, whether in Switzerland or in our own immediate neighbourhood—as probably at Duddingston, for instance—was one of the deepest interest, and the Society should lose no opportunity of elucidating the history of our Scottish lacustrine habitations.

---

MONDAY, 14th March 1870.

DAVID LAING, Esq., Foreign Secretary, in the Chair.

The Chairman reported that, at a meeting of the Council of the Society, held previous to the present meeting, The Right Hon. LADY JOHN SCOTT had been unanimously elected a Lady Associate of the Society of Antiquaries of Scotland.

A ballot having been taken, the following Gentlemen were elected Fellows :—

CHARLES EDWARD WILSON, LL.D., H.M. Inspector of Schools, Glasgow.

GEORGE KING, Esq., Aberdeen.

JOHN WHITE of Netherurd, Esq., Peeblesshire.

ARCHIBALD GEIKIE, Esq., F.R.S., Director of the Geological Survey of Scotland.

The following Donations to the Museum and Library were announced and thanks voted to the Donors :—

(1.) By ROBERT GRAHAM THOMS, Esq., Clepington House, Dundee.

Two Spiral Armillæ of bronze, 3 inches diameter, formed of bronze wire,  $\frac{3}{16}$ ths of an inch in thickness, passed eleven times round the arm, and swelling at either extremity into straight trumpet-shaped ends an inch in diameter.

Armlet, formed of a single turn of thicker bronze wire, with trumpet-shaped ends. (See woodcuts, p. 343.)

Three Portions of a Necklace of Chank Shell. (See woodcuts, p. 345.)

A number of Bronze Rings, of various sizes, probably ear-rings.

An Iron Spear-head, 23 inches in length.

An Iron "Daw," or broad-bladed, short, pointless sword.

The Bones of both the Arm and Forearm of the Skeleton showing a green stain where the armillæ were worn; the larger being on the arm, and the smaller on the forearm.

All the above were taken from a Naga grave in Laback, Cachar, on the Assam frontier of India. (See subsequent Communication by Mr Thoms.)

Also a Collection of the Arms, &c., of the Nagas and neighbouring tribes, comprising—

Two Naga Hunting Spears, 6 feet in length.

One Cookie Hunting Spear, 5 feet in length.

One Hindustani Tulwar.

Two Munipoorie Tulwars.

One Munipoorie Hunting-knife.

One Munipoorie Crease or Dagger.

One Naga Daw, used for cutting down trees.

One Cookie War Daw.

One Sylhet Daw, for cutting down jungle grass.

One Sylhet Daw, for cutting cane and bamboos.

Three Cookeries (curved war-knives, sharp on the concave edge) from Nepaul, one with sheath.

One Elephant Spear, 6 feet 10 inches long, and having a blade  $4\frac{1}{2}$  inches in breadth.

Six Arrows of a hill tribe bordering on Munipoorie.

Musical Instrument of the Cookies.



Pipes smoked by the Cookie women.  
 Pipes smoked by the Cookie men.  
 Munipoorie Bridle and Pony Whips.

(2.) By Mr LEWIS W. FRASER, farmer, Achroisk, Banffshire.

An Urn, of the "Drinking-cup" type, which was found some years ago at Achroisk, in a short cist, four feet under the surface of a sandy knoll. The urn is of yellowish clay, and, as usual, is slightly contracted in the middle; it measures 6 inches high and  $4\frac{3}{4}$  inches broad across the mouth. It is ornamented with three parallel bands of long and short longitudinal and transverse lines, made by an impressed instrument, the larger longitudinal ones having been formed by a toothed implement. The cist was formed of slabs of micaceous schist about  $2\frac{1}{2}$  feet long. The skeleton was contracted or doubled up, and laid north and south. The urn stood at the feet, and contained nothing. A bluish stain remained on the clay of the inside of the urn.

(3.) By GEORGE SCOTT, Esq., Dunstan Square, Bilton.

An Iron Spear-head,  $10\frac{1}{2}$  inches in length, with socket, found in a well at Dunstanburgh Castle.

(4.) By JOHN STUART, Esq., LL.D., Sec. S.A. Scot.

The Book of Deer. Edited for the Spalding Club, by John Stuart, Secretary. Edinburgh, 1869. 4to.

(5.) By the SMITHSONIAN INSTITUTE.

Smithsonian Report, 1867. Washington, 1868. 8vo.

(6.) By the ESSEX INSTITUTE.

Essex Institute Historical Collections. Town Records of Salem, 1634-1659. Salem, 1868. 8vo.

Proceedings of the Essex Institute, 1867. 8vo.

(7.) By the AMERICAN PHILOSOPHICAL SOCIETY.

Proceedings of the American Philosophical Society, 1868. Philadelphia, 1869. 8vo.

Transactions of the American Philosophical Society, 1868. 8vo.

(8.) By the BOMBAY GEOGRAPHICAL SOCIETY.

Transactions of the Bombay Geographical Society. Vol. XVIII.

(9.) By the CANADIAN INSTITUTE.

The Canadian Journal. November 1869.

(10.) By the ANTHROPOLOGICAL SOCIETY OF LONDON.

Memoirs of the Anthropological Society of London. Vol. III. London, 1869. 8vo.

The Anthropological Review and Journal of the Anthropological Society of London. No. 28.

(11.) By the ROYAL SOCIETY OF ANTIQUARIES OF COPENHAGEN.

Mémoires de la Société Royale des Antiquaires du Nord. Copenhagen, 1869. 8vo.

(12.) By N. OSWALD BRODIE, Esq.

Forestier Illuminato intorno le Cose piu Rare e Curiose, Antiche e Moderne, della Citta di Venezia, etc. Di S. A. R. Federico Cristiano, Principe Reale di Polonia, etc. Venice, 1765. 8vo.

The following Communications were read :—