

MONDAY, 10th *February* 1890.

J. R. FINDLAY, Vice-President, in the Chair.

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

JOHN C. M'EWEN, Trafford Bank, Inverness.

REGINALD MACLEOD OF MACLEOD, Queen's Remembrancer, Edinburgh.

THOMAS MILNE, M.D., Alloa.

J. C. S. VAUGHAN, M.B., C.M., 3 Palmerston Road.

WILLIAM STEWART YOUNG, 67 Queen's Gardens, London.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors :—

(1) By G. F. LAWRENCE, Wandsworth, London.

Six Scrapers of Flint from Mildenhall, and two from Icklingham, Suffolk.

Two Scrapers of Flint from the Yorkshire Wolds, and one from Dover, Kent.

Three Chips and five Rude Implements of Flint from the Drift at Wandsworth, and one Rude Implement from North London.

Seven thin elongated Flakes of Flint; one ridge-backed and one triangular Flake; four Chips, with secondary working; and one rude Implement, from the bed of the Thames.

Two Rude Implements of Chert from Bois du Rocher, Brittany.

(2) By W. F. SINCLAIR, Acting Collector, Kolaba, through Dr JAMES BURGESS, Director of the Archæological Survey of India.

Collection of Flint Cores, Flakes, and Chips from the Kolaba District, Bombay, India, seventy specimens. In connection with these, Mr Sinclair (to whom the Society has been under similar obligations before) has supplied the following notes on the traces of the manufacture of flint implements in the Kolaba District :—

The Kolaba District is that part of the North Konkan lying between the Western Ghats and the sea, and under the 19th degree of North latitude;

opposite the island of Bombay, and for 60 miles to the southward. It is exceedingly mountainous, but has wide valleys (which appear to have been lake-beds) belonging to three drainage areas. The first sends all its waters into Bombay Harbour; those of the second, or Rohe, basin, next south of it, flow by the Kundlika River into the sea at Rewadanda; and those of the third and southernmost by the Savitri at Bankot.

Throughout this area the only rock formation is the Deccan trap; but the valleys contain great deposits of gravel derived from the upper traps, and from laterites formerly resting on these, of which a few deposits remain *in situ* as caps of hills.

The gravels are full of agate, chalcedony, and similar siliceous pebbles derived from the geodes of the trap.

Cores and chips have been found in various places in the Savitri and Bombay Harbour basins, not as yet in that of the Kundlika. No perfect implement has yet been found. The cores are very small. No flake from any yet found can have exceeded 2 inches in length, and most of them must have been much less than that; many under 1 inch long.

The material is always agate or Cornelian from the geode pebbles.

Generally, the specimens have been found on the surface of the gravel deposits, or of rock or other soil near such deposits. Examination of sections of the gravel and other alluvial strata has hitherto failed to detect any specimen below their surface.

For geological reasons, too long to go into here, it is believed that these surfaces were for the most part exposed by a depression of the region which drained the lakes, and which took place within times geologically very recent; within the period of at least one tree now growing freely in parts of the district.

The flint remains, therefore, belong also to the recent period, as do the much more important remains of the same class in Sind.

One very primitive race still existing in the district, the Kátkaris, still sometimes use smooth pebbles as heads for blunt arrows, used in killing birds. They do not, however, use flint implements in any form, except for striking a light, and they have no idea of shaping a flint. To make one for striking a light they simply smash one of the agate pebbles with a heavier stone, and choose the fragment of most convenient shape.

No manufacture of gun-flints appears to have existed in the district at any time. Indeed, I do not think that that industry has ever existed in any part of India.

The flint-lock only began to take the place of the match-lock under Haidar Ali in the eighteenth century, and had by no means come into general native use when the percussion cap superseded it in its turn. The total period during which such an industry could have thriven at all in India was therefore only

about a century; and the needs of the country appear to have been entirely supplied from Europe. This was certainly the case in the Kolaba District. The native ammunition merchants tell me that the few imported gun-flints now in their possession are very old stock, and not in any demand.

There is not a soul in the district except myself who knows how to produce the peculiar grooved surface of a flint core, and no person has had any chance of imposing imitation cores upon me, as all my specimens were picked up in my own presence; most of them by my own hand.

The localities in which cores and flakes have been found are:—

Village	Taluka	} Savitri area.
Mhád	Mhad	
Khandád	Manganm	} Bombay Harbour drainage area.
Kolgaum	Alibag	
Panwell	Panwell	
Pen	Pen	
Dhaute	Pen	
Shiroli	Pen	
Jambiwli	Pen	

Of these the richest locality is in Dhaute, close to the town of Pen, on the right bank of the Bhogeshwari River, at a place where it pours over a basaltic bar, forming a cataract in the rains. In the fine weather the water is confined to narrow channels in the basalt. This was probably the circumstance that made the place a favourite settlement with the flintmen, as being very favourable to primitive methods of fishery.

The supply of pebbles at Dhaute is not superior to that of a great many other spots; but the number of cores found here far exceeds that of all my other finds put together.

Besides grooved cores and flakes a great many pebbles have been broken in the attempt to form suitable cores, and then rejected on account of flaws revealed by that operation. They remain in cuboid shapes, such as would attract no attention, and support no inference if occurring only in isolated cases. But their abundance and their local connection with the grooved cores justify their attribution to the same hands that wrought the latter. Nor is there any reason to suppose that any other hands have ever been employed in collecting and breaking pebbles on that spot.

(3) By Dr ROBERT MUNRO, *Secretary*.

Two Rude Implements of Flint from the Drift at St Acheul, near Amiens.

Rude Implement of Chert from Chelles, Department of Maine, France.

(4) By Dr BAJENOFF, through Dr R. MUNRO, *Secretary*.

Lozenge-shaped Spear-head of flint $2\frac{1}{8}$ inches in length, and two small pieces of pottery ornamented with circular depressions, from a pre-historic station on the banks of the Oke, Province of Riazanne, Russia.

(5) By A. G. FOWLER, Architect, Montreal.

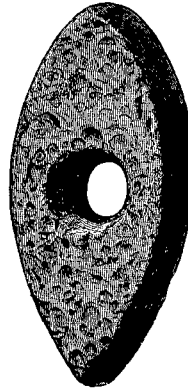
Bronze Sword $22\frac{7}{8}$ inches in length, with the greater part of the handle-plate gone, and with two rivet-holes in each wing, one of which still retains its rivet, found before 1825, on the farm of Southfield, parish of Gladsmuir, East Lothian.

An old Bayonet, time of George I., found at Gladsmuir.

Eleven Provincial Tokens, viz., Edinburgh Halfpenny 1791, Dundee 1797, Montrose 1799, Inverness 1793, Leith 1796, Glasgow 1791, Coventry 1799, Birmingham 1792, North Wales 1760, Anglesea Mines Halfpenny 1788, and Farthing 1796; five Brass Counters or Nuremberg Tokens, &c.

(6) By WILLIAM PRENTICE, through Rev. ARCHIBALD PRENTICE, Joppa, Portobello.

Hammer of porphyritic stone (fig. 1) much weathered, 4 inches in length by $1\frac{7}{8}$ inch in breadth and $1\frac{3}{8}$ inch thick at the shaft-hole, which is $\frac{7}{8}$ inch in diameter at the exterior surfaces narrowing to half an inch in the centre. It was found among the shingle on the margin of Cobbinshaw Loch, parish of West Calder, in 1885.



(7) By Rev. GEORGE WILSON, Glenluce, Corr. Mem. S.A. Scot.

Oblong Boulder-Stone used as a Grinding-Stone; Flint-flake Knife; Small Bead of Yellow Glass, and some fragments of Bronze, from Park, Glenluce.

Fig. 1. Stone Hammer found at Cobbinshaw Loch (4 inches in length).

(8) By Rev. JOHN E. FRASER, Dores, Inverness-shire.

Small Whorl of grey sandstone, with ornamentation of triangles

filled with lines parallel to one side, found at Dores, Inverness-shire.

- (9) By JAMES TODD, Glenree, Arran, through W. IVISON MACADAM, F.S.A. Scot.

Whorl of Burnt Clay and Flint Knife found on the farm of Glenree, Arran.

- (10) By Rev. JAMES MORRISON, Urquhart, Elginshire, Corr. Mem. S.A. Scot.

Serrated Arrow-head of white flint with barbs and stem; leaf-shaped Arrow-head of reddish flint; lozenge-shaped Arrow-head and Scraper of triangular section; Flint Saw, and five other Implements of Flint, and long Flint Flake from Urquhart, Elginshire.

Axe-head of diorite from Geelong, Australia.

- (11) By Rev. WILLIAM FORSYTH, Minister of Abernethy, Strathspey.

Knocking-block of wood, and its wooden Mell, for husking barley, from Tulloch, Parish of Abernethy, Strathspey. The block is a portion of the bole of a fir-tree $23\frac{1}{2}$ inches in height by $16\frac{1}{2}$ inches in diameter, having in its upper end a circular cavity $10\frac{1}{2}$ inches in diameter and 13 inches in depth, tapering conically to the bottom. The mell is also of fir, the head 18 inches in length by $3\frac{1}{2}$ inches in diameter, the striking face studded with iron nails driven into the head, and the shaft 18 inches in length. Wooden knocking-blocks are now very rarely to be found.

- (12) By J. S. DUNCAN, F.S.A. Scot., Blairgowrie.

Double-hanging Candlestick of wrought iron, and an old Steel for striking fire with flint.

Regiam Majestatem: the Auld Lawes of Scotland, &c., faithfullie collected be Sir Johne Skene. Edinburgh: Thomas Finlason. 1609, folio.

- (13) By EMILE CARTAILHAC, through Dr ROBERT MUNRO, *Secretary*.

La Grotte de Reilhac. 4to, 1889.

Les Monuments Primitifs des Iles Baleares (plates only).

- (14) By ALLAN WYON, F.S.A. Scot., the Author.

The Great Seals of England. Folio, London, 1887.

- (15) By Dr C. H. BEDFORD, Surgeon in H.M. Bengal Army.

History of George Heriot's Hospital, &c. By W. Stevens, D.D.
Third Edition. Revised and enlarged by F. W. Bedford, LL.D., D.C.L.

There were also Exhibited :—

- (1) By JOHN RAE, 16 Hanover Street, Aberdeen.

Axe-Hammer of diorite, $7\frac{7}{8}$ inches in length, with shaft-hole perforated from each face, on the same plane as the cutting edge, which is slightly expanding, sharp, and $2\frac{1}{8}$ inches across. The butt tapers from all four sides above the shaft-hole to a bluntly rounded edge. Found at Fyvie, Aberdeenshire.

Hammer of gneiss, $4\frac{1}{8}$ inches in length by $2\frac{1}{8}$ inches across one end and about $1\frac{1}{8}$ inch across the other; with shaft-hole drilled straight through at right angles to the ends, which are blunted. One face is finely polished and the other much weather-worn. Found at Kintore, Aberdeenshire.

Ball of quartzite, 3 inches in diameter, with the surface cut into six projecting knobs, each $1\frac{3}{4}$ inch in diameter. Found at Tarves, Aberdeenshire.

Ball of reddish granite, $2\frac{7}{8}$ inches in diameter, with the surface cut into five oval-shaped and two circular projecting knobs. Found at Turriff, Aberdeenshire.

Ball of blackish sandstone, $2\frac{7}{8}$ inches in diameter, with the surface cut into six projecting knobs, each $1\frac{3}{4}$ inch in diameter, and having the intervening spaces filled with small triangular projections. Found at Bethelnie Hill, Tarves.

Ball of reddish sandstone, $2\frac{3}{4}$ inches in diameter, with the surface covered with small projecting knobs, each half an inch in diameter. Found at Hill of Barra, Aberdeenshire.

Ball of basalt, $2\frac{2}{6}$ inches in diameter, with the surface covered with small projecting knobs from $\frac{1}{4}$ to $\frac{3}{8}$ inch in diameter. Found near Peterhead.

Chisel of greyish-white flint, $3\frac{3}{8}$ inches in length by $1\frac{3}{8}$ inch in greatest breadth and half an inch in thickness, polished, especially at the cutting edge; said to have been found at Auchterless, Aberdeenshire, but possibly from Denmark or Scandinavia.

Core of reddish-brown flint, $4\frac{1}{2}$ inches in length, and having each end roughly chipped as if for use as a gouge, said to have been found at Hill of Dudwick, Aberdeenshire.

(2) By Mrs BOYD, Highthorn, West Kilbride—

Small Adze of indurated clay-slate, and Spear-head of brownish flint. Found at West Kilbride.

The adze is of dark-coloured clay-slate, 3 inches in length by $1\frac{3}{4}$ inch in breadth and half an inch in greatest thickness, somewhat roughly made and ground to a curved cutting edge. The spear-head is of a brownish flint, 3 inches in length by $1\frac{3}{4}$ inch in greatest width, near the base, where it reaches a thickness of nearly half an inch. In shape it is leaf-shaped, being rounded off to the butt, and tapering forward to a rather bluntish point. Both these implements are said to have been found at a spot where there were urns and burnt bones found as marked on the Ordnance Survey Maps, and described in Fullerton's *Pont*, 1858.

(3) By Mrs CAMERON CAMPBELL of Monzie, through A. J. S. BROOK, F.S.A. Scot.

Three Old Highland Brooches of brass, a Highland Brooch of silver with the Glasgow mark—the stamp “T & H,” the initials “A.C.” and date 1783; massive finger-ring of silver inscribed in compartments “IHESVS NA” (for Nazarenus), a betrothal ring of silver inscribed but illegible, and two Eastern rings.

- (4) By A. J. H. CAMPBELL, of Dunstaffnage, through A. J. S. BROOK, F.S.A. Scot.

Portion of Tartan (supposed to be of the Clan Campbell set) dug up from a peat-moss near Dunstaffnage.

The following communications were read :—