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OF THE

Cambridge Antiquarian Society,

31 OCT. 1904—22 MAY 1905.

WITH

Communications

MADE TO THE SOCIETY.

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PROCEEDINGS
OF THE
Cambridge Antiquarian Society;
WITH
COMMUNICATIONS MADE TO THE SOCIETY.

31 October, 1904—22 May, 1905.

Monday, 31 October, 1904.

A. C. HADDON, Sc. D., F.R.S., President, in the Chair.

The meeting was held in Lecture Room C of the
Sedgwick Museum of Geology.

Major A. J. PELL exhibited and explained the origin of a large number of bronze objects from the collection of spears, swords, celts, etc., found by the late Mr O. C. Pell, of Wilburton Manor, in January, 1882. The arable field in which the articles were found is situated in a valley to the south of the so-called "high land" of which the Isle of Ely was originally composed. The discovery was made by a labourer in the space of six feet by three feet, and not more than two feet below the surface. Part of them appeared to have been injured by a fen fire, as it was the custom formerly to set fire to the peaty soil, with a view to improving it. It had been suggested that a boat collapsed at that spot, and certainly in the olden days the place must in the winter have often been under water. It seemed

impossible to believe that the hoard was the armament of any military body, yet the fact that they were not defaced precluded the idea that they were votive offerings to the gods. Mr Pell quoted the opinion of Sir John Evans¹ on the nature of the specimens, and mentioned that in the year 1893 a fine and uninjured sword was found in Wilburton Fen.

Professor RIDGEWAY proposed a vote of thanks to Major Pell for his paper, and the opportunity he had given them to examine that unique find. He (Professor Ridgeway) referred to a fire which occurred in Horningsea and Ditton Fen twenty years ago, and the effects of which were traceable at a depth of $2\frac{1}{2}$ and 3 feet.

Professor HUGHES thought the objects had been burned before they were brought together in that place. He was inclined to believe that the hoard was the result of a levy of bronze, when scrap metal was extremely scarce. The date of the exaction must be fixed through the newest specimen in the collection. It was not likely that they were an armourer's stock-in-trade.

Professor HUGHES communicated some interesting information about the Roman pavement which was discovered by Mr Robert Stephenson, J.P., late Chairman of the County Council, in his orchard at Landwade. The site of a villa had been found, and in the *atrium* were the remains of a pavement. Much of the material used in it was foreign to the neighbourhood, and it was likely that the work was undertaken by a travelling Roman artificer. Subsequent owners of the building did not restore the mosaic, but patched it with cement. The Society were greatly indebted to Mr Stephenson, who had facilitated the work by every means in his power, including the sacrifice of part of his orchard. Professor Hughes described the method by which the pavement was restored and removed to the Geological Museum.

A chair, probably made in Flanders in the early part of the 16th century, was exhibited by H. D. Catling, M.A., of St John's College. It had formerly belonged to Miss Lofts, of Hardwick.

Votes of thanks to Mr Stephenson and to Professor Hughes and his staff having been accorded, the proceedings closed.

¹ See his paper *On a Hoard of Bronze Objects found in Wilburton Fen*, read 20 April, 1882, in which a number of the objects are figured. *Archæologia*, Vol. XLVIII. p. 106.

Mr W. AMBROSE HARDING and Professor HUGHES gave an account of the researches which they had carried out at Arbury Camp, near Cambridge, in continuation of the work begun there in 1902.

ARBURY.

Second Report.

BY PROF. T. MCKENNY HUGHES, M.A., F.R.S.

ON a former occasion¹ I gave a description of the remains found at various times or still to be seen at Arbury, and offered some speculations as to the object with which the earthworks may have been constructed, and suggestions for the guidance of those who might be induced hereafter to undertake the systematic exploration of the site. Fortunately the work has been taken up in a very spirited way by Mr Ambrose Harding, and I am now able to offer an *ad interim* report of the results.

I can also add a few facts respecting the objects found within the circular enclosure and over the adjoining ground. Most of the Roman coins and fragments of pottery were found in the next field but one on the north, to the east of Cawcutts Farm. (See Plan of Site, fig. 1.) There are traces of banks and ditches and disturbed ground over a considerable area to the north of Arbury, and, although some of this may be due to gravel-digging, it may well be that the principal settlement of Roman or Romano-British times was here, rather than within the ring at Arbury.

Mr Burkett, of Arbury Camp Farm, informed me that a small gold coin was found about fourteen years ago in the surface soil in or near the enclosure, and sold to Mr Sadd in Cambridge.

I learned also from Mr Unwin that when a drain was being cut across the field south of the railway, and north-east of Arbury, a thick wall built of bricks and large stones was

¹ *Camb. Ant. Soc. Comm.* No. XLIII. Vol. x. No. 3 (Vol. IV. N. S.), p. 277. May 15, 1902.

crossed. The stones shown to me by Mr Unwin, as similar to those of which the wall was constructed, were fragments of oolite, chalk rock, etc., out of the drift. The mortar was so strong that the workmen had much difficulty in cutting through it. The wall was about six feet in thickness and ran from

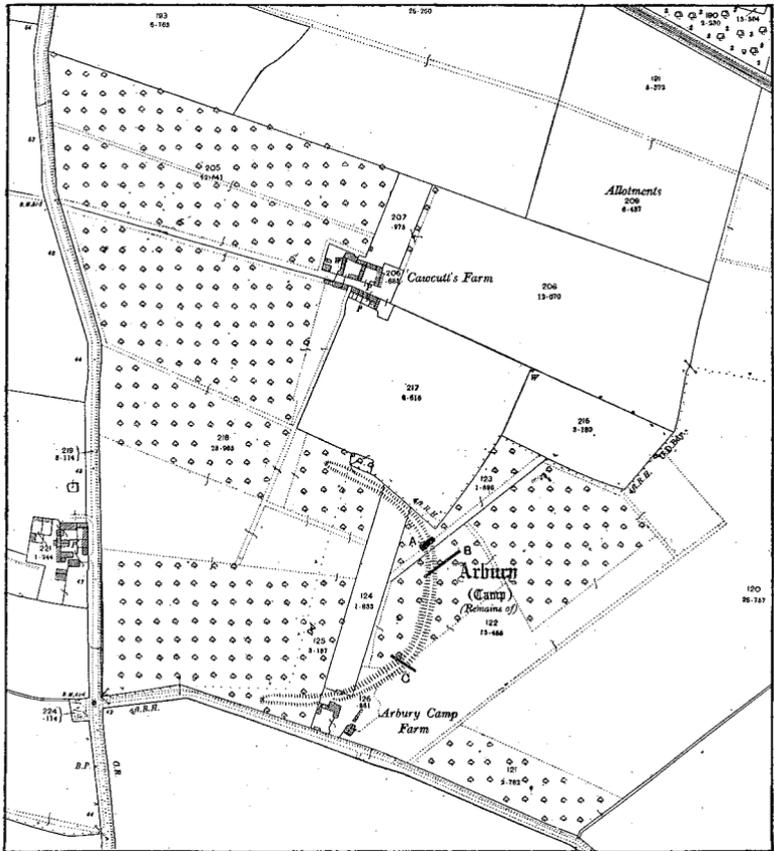


Fig. 1. Plan of Arbury Camp: reduced from the Ordnance Survey.

south-east to north-west, crossing the drain obliquely. It was seen only where the drain passed through it, and as it does not appear anywhere near the surface, there are no indications from which we can infer how far it ran either way.

In the endeavour to trace ancient earthworks or settlements from an examination of the ground, one of the first steps to be taken is to ascertain whether there is any natural product in the district which might have caused excavations to be made, and then to observe the manner in which those excavations are carried out in each case, so that, when we come to disturbed ground, we may recognise the origin of the various irregularities of surface, and not waste our time in seeking for hut circles, etc., where the pits are due, for instance, to gravel-digging. Now in the case of Arbury, we might be inclined to explain the destruction of the western half of the enclosure to the manner of digging out phosphate nodules or coprolites as they are commonly called. But the Camp is entirely outside the area over which the phosphate bed occurs.

On the north side of the camp there is much reason for thinking that there was a settlement in late Roman times, and the ground is dug over and trenched often in a somewhat regular manner. Here we must be careful. The site is upon an extensive bed of gravel, but gravel of a very variable composition, so that pits were sunk here and there in the attempt to procure fine sand or coarse gravel as might be required. This does not, however, throw doubt upon there being earlier excavations for a different purpose. In fact the very existence of material thrown up during the trenching for an ancient settlement may well have indicated where the gravel or sand lay, and have given rise to later and less regular excavations.

A very useful line of research in such a case is an enquiry into the relative dates of fences, ditches, drains, roads, etc. It is not long since the country north of Cambridge was enclosed, but that does not mean that it was not cultivated, or that there were no ditches or fences on any part of it.

Arbury Road, or Arbury Camp Road as it is locally called, runs obliquely W.N.W. from the Cambridge-Milton Road to join the road from Cambridge to Histon (see Plan, fig. 1), but when the Arbury Road gets to the Camp it is deflected and runs south of the camp into the Histon Road. Evidently the Camp was either enclosed when the Arbury Road was

made, or presented such an obstacle that it was thought better to avoid it.

The parish boundary runs along the Arbury Road from the Histon Road to Arbury Farm, and then is taken in a straight line across the middle of the Camp from where it first becomes conspicuous on the south side to the corresponding point at the end of the existing bank on the north. From this it follows the outline of the Camp for some distance, and then seems to have been determined by an old deep ditch which runs into the fens to the east, and zigzags in a manner which indicates that it was dug along the fences between ancient enclosures. Of course these distributions belong not to the time of the original division of the counties into parishes, but to the exact delimitation which was necessitated by carrying out the Commons Enclosures Act.

A curious story is told in the district which throws some light upon this question, and the social conditions of the time. A dead body was found in the Camp, or at any rate in the enclosure in which it occurs. The parish of Impington said it was none of theirs, and refused to bury it. The parish of Chesterton took charge of it and buried it. When the parish boundaries were afterwards being fixed, Chesterton claimed and obtained a considerable portion of the area, on the ground that they had accepted the obligation of burying the corpse found upon it, and the other parishes acquiesced in this decision.

In digging a post-hole near the railway N.E. of the Camp, a small bronze image of a man was found by Mr Unwin. This gave rise to great hopes, as every now and again bronze figures of Roman age have been turned up along the borders of the Fenland. Upon enquiry I learned that it had been handed over to the Rev. Peter Mason, M.A., Fellow and President of St John's College, on whose property it was found. He very kindly gave it to me, and I have placed it with the other objects from that district in the collection of Mr Ambrose Harding, at Histon Manor. It did not, however, prove to be of such interest as the first accounts seemed to justify: it is probably, as suggested by my wife, a figure of Aladdin, and most likely formed part of a small lamp of recent date.

One of the first things to aim at in carrying on excavations on such a site is to ascertain what was the original surface soil through which the fosse was dug, and on which the vallum was heaped up. But that which at first sight appears so simple, is not in this case as easy as might be supposed. The Camp is constructed upon the edge of a terrace of gravel, sand, and loam of very variable character, and the marginal fen deposits which abut against it are largely made up of the *remanié* material which in fine weather crumbled, and in wet weather was washed down the slopes, while intermittently plants grew on it, or flood waters carried mud and wrack, and heaped it up along the shore. It is obvious therefore that it must be difficult to discriminate, in small and often water-logged sections, between the re-sorting due respectively to natural and to artificial operations.

It is useful therefore to place on record another section seen at a little distance from the Camp.

Mr Burkett, of Arbury Camp Farm, informed me that when he was digging a hole for a gate-post, about 100 yards east of his house, by the "Arbury Road" he found the following section (fig. 2).

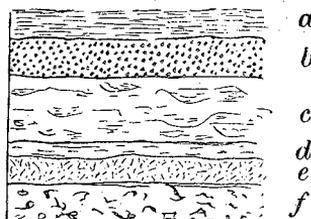


Fig. 2. Section: scale 8 feet to 1 inch.

- | | |
|---|--------------------------|
| a. Surface soil. | b. Yellow sand. |
| c. Sand, loam, and clay, irregular in arrangement and variable in colour. | |
| d. White clay. | e. Grey silt. |
| | f. Gravel full of water. |

This section is in natural soil, and therefore useful for comparison with what we found in the trenches cut across the fosse and vallum.

The next section to be described (A), fig. 3, though not the first we opened, is one across the bank in the N.E. quadrant close to the fence in the green roadway west of the orchard. In this section (*a*) is the surface soil, which is probably due to agricultural operations and the action of the weather, and is banked up against the remains of the original vallum on either side. The material of which the vallum was constructed is represented by *b*, *c*, and *d*. Where this was procured is not clear. What fills the fosse is the wash-down from the bank, *d'* being made up of *b*, *c*, and *d*, and *e'* much resembling the natural bed *e* which is seen below the material thrown up to form the vallum. The black sandy silt with white chips of flint (*f*), from the condition of the flints appears to be derived

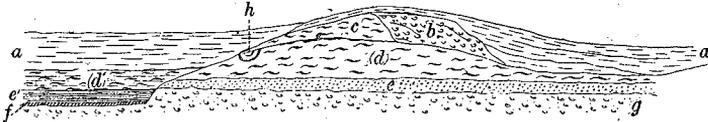


Fig. 3. Section (A). Trench in N.E. quadrant close to fence in green roadway west of orchard. Scale 8 feet to 1 inch.

- | | |
|---|--|
| <i>a</i> . Brown soil. | <i>b</i> . Gravel thrown up to form bank. |
| <i>c</i> . Mottled sandy clay thrown up on bank. | |
| <i>d'</i> . Re-sorted clayey loam filling fosse or (<i>d</i>) thrown on bank. | |
| <i>e</i> . Grey silt. | <i>e'</i> . Re-sorted grey silt. |
| <i>f</i> . Black sandy silt with white chips of flint. | |
| <i>g</i> . Gravel. | <i>h</i> . Pit with burnt soil and charcoal. |

from a surface soil. On the outside of the vallum, about half-way down, but covered by between two and three feet of surface soil, there was a small pit about 18 inches across and 18 inches deep, filled with charcoal and burnt soil. Similar pits occurred in the section next to be described, both inside and outside the vallum. These fireplaces may be compared with those found in the War Ditches¹, and their occurrence sometimes on the inside and sometimes on the outside of the vallum may be explained by their being lighted on the side sheltered from the wind.

We found no objects that gave the slightest clue to the age of the work.

¹ *Camb. Ant. Soc. Proc.* No. XLIV. p. 452.

The next trench to the south (B) was cut across the vallum and a little way on either side of it.

The ground was, when we were digging, full of water, sometimes rising after rain to within three feet of the surface, and, as I pointed out in my former note on the site, the water level must have determined the depth to which the fosse was excavated. Even allowing for the exceptionally wet season we have had, we cannot speculate upon the probability of a deep fosse here. The section across the bank also shows that the amount of material thrown up was not great, and we must reduce the estimated height of the rampart also. But this was the side next to the fen, and as the Camp probably belongs to an age before the reclamation of the fenland, it is quite possible

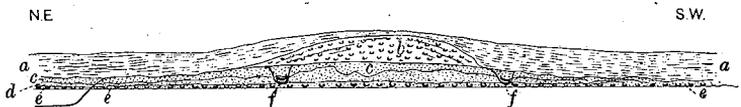


Fig. 4. Section (B). Trench in N.E. quadrant S. of (A).
Scale 8 feet to 1 inch.

- a. Soil : brown loamy soil with plenty of humus.
- b. Gravel thrown up to form bank.
- c. Light grey sandy loam lying in a patchy irregular manner.
- d. Red sandy loam evidently belonging to gravel.
- e. Gravel full of water.
- f. Shallow pits with charcoal and burnt soil.

that strong defensive works were not considered so necessary here. This must be looked into carefully if we ever have an opportunity of examining a section across the fosse on the inland side of the Camp.

There are two small ditches, one outside and one inside, close to the bank, but they do not seem to have been sunk into the gravel sufficiently to account for the gravel thrown up on the bank, and we have not found where the gravel of the bank was procured. The occurrence of fireplaces, *i.e.* holes with charred wood and burnt clay, shows that the water did not always rise to the high level at which it now stands, and possibly some of the gravel which has been taken as the

undisturbed bed may have been moved, and got consolidated by the wet and the load of soil above it.

When we dug through the clay in the fosse and touched the red gravel, the water rose at once to within 4' 8" of the surface, and bubbles of air or gas rose through it for some time.

The explanation of this may be that the water in this exceptionally wet season had risen through beds of gravel, the interstitial spaces in which had in the previous dry seasons been filled with air or gas which was now held up under the irregular capping of clay until released by our excavations.

The third trench (C) was cut across the steeper part of the bank immediately north of Mr Burkett's farm. In this section there was more distinct evidence of the mottled white, clayey

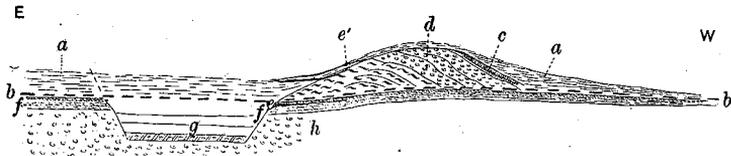


Fig. 5. Section (C). Trench in S.E. quadrant North of Burkett's farm.
Scale 8 feet to 1 inch.

- a. Modern surface soil.
- b. Ancient surface with ancient soil resting on it.
- c. Black carbonaceous earth at base of a.
- d. Gravel thrown up on bank.
- e. Mottled clayey loam, sometimes white.
- e'. Mottled loam thrown up on bank.
- f. Grey silt between mottled loam and gravel.
- g. Silt filling lower part of fosse (1'6" black at base with chips of white flint and some black flints).
- h. Gravel full of water.

loam which is above the gravel having been dug out first and thrown on the bank, and the gravel which was deeper down having been thrown up afterwards.

There was here a much heavier surface soil on the inside, and the gentle slope of the ancient surface soil, with the vegetation which grew there before the vallum was made, could be clearly traced. It would be very interesting if the character of that vegetation could be determined, but where we exposed it, it was a mere band of carbonaceous matter.



FIG. 1.



FIG. 2.

There was a layer of black carbonaceous earth at the base of the surface soil (see "Section C") and resting on the gravelly material of the vallum, and therefore of course much newer than the ancient surface soil above described. There was also at the bottom of the fosse the bed of black silt seen in Section (A), with white flint chips and some larger black flints.

In the surface soil here we found a fragment of a small bronze vessel, but we could not trace any connection between it and the earthworks.

Monday, 14 November, 1904.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

Mr W. B. REDFERN, of Inveruglas House, Cambridge, made the following communication on

AN ELIZABETHAN BUSHEL MEASURE.

By the courtesy of the Mayor and Corporation of Cambridge permission has been obtained to photograph the very interesting bronze bushel measure which was recently brought to light in the old office of the Weights and Measures in the Guildhall, after having been hidden away among a quantity of lumber, and entirely forgotten, for some generations.

The vessel is of solid bronze, is tub-shaped, and stands on three ornamental feet. Its dimensions are as follow:—Diameter, 1 ft. $7\frac{1}{4}$ ins.; height, $10\frac{1}{2}$ ins.; depth, 8 ins. It is $\frac{3}{8}$ in. thick, and its weight is $69\frac{1}{2}$ lbs. On a ribbon running about midway round the measure is this inscription, in bold, well-formed letters, as will be seen from the photographs (figs. 1, 2) which illustrate the measure from different points of view:

ELIZABETH, then a crowned Tudor rose; DEI . GRACIA ANGLIÆ, then a portcullis crowned; FRANCIÆ . ET, then a crowned fleur-de-lis; HIBERNIÆ . REGINA; and then a crowned *E . R.*, joined together by a love-knot; then comes the date: 1601. Between the ribbon and the lip of the vessel occur the letters *E . R* crowned, thrice repeated. On the edge of the

measure are four inspector's stamps, two of which may be described as "checker's" marks. The other two are the crowned initials, G . R IIII. (George IV.), which points to the probability that this was the last period when its accuracy, as a measure, was tested.

The town of Northampton has a similar bushel measure of the same date. The City of Winchester also possesses a bronze bushel measure of a like shape and character, but of an earlier date, and wanting the ribbon for its inscription. Another bell-metal measure is reported to have been unearthed at a farm at Kingsnorth, which was sold from there for a couple of pounds, but eventually came into the possession of an American collector for a sum exceeding £60. This measure, however, is comparatively modern, as its date is said to be of the reign of George III.

The Cambridge Corporation is rather rich in its collection of antiquarian relics, for, in addition to an extremely fine set of silver-gilt maces (which are illustrated by the writer in Llewellyn Jewitt's *Corporation Plate*), one, the largest, of the reign of Queen Anne, it has a small copper-gilt sergeant's mace of the time of Charles I., which, until seventeen years ago, was hidden away under heaps of dusty ancient documents in the old Muniment Room of the Guildhall, placed there probably during the Civil War. The Corporation also still retain their original Grant of Arms given in 1575, and in the Town Clerk's office stands an ancient oak coffer, several feet long and protected by numerous iron bands, known as St Andrew's Chest. There is, in addition, a good example of a bell-metal gallon measure $7\frac{1}{2}$ ins. high, with the Royal Arms on one side and the Borough Arms on the other, beautifully incised, together with the legend below:

The Standard of the Town of Cambridge, 1646.

Observations on this interesting measure were made by Mr DECK, and by J. W. CLARK, M.A., Registry of the University, who exhibited a bushel measure preserved in the Registry. This closely resembles, in general design, the measure belonging to the Town; but it was made in the reign of Charles I.

On one side are the Arms of England, with the Stuart supporters, a lion and a unicorn, and opposite to them is the date, 1641. Several other measures and weights belonging to the University, now preserved in the Museum of General and Local Archæology, were exhibited by Baron A. VON HÜGEL, M.A., Curator.

The Registry also exhibited a curious instrument (here figured), which, until recently, was in the custody of the Proctors, but is now kept in the Registry. It used to be called a butter-measure, and was supposed to have tested the yards of butter sold in Cambridge market. After a lively discussion, in the course of which Professor HUGHES, Professor RIDGEWAY, and others showed that this view was untenable, and that it was probably a gauge for liquor, Mr REDFERN kindly undertook to figure and describe it.

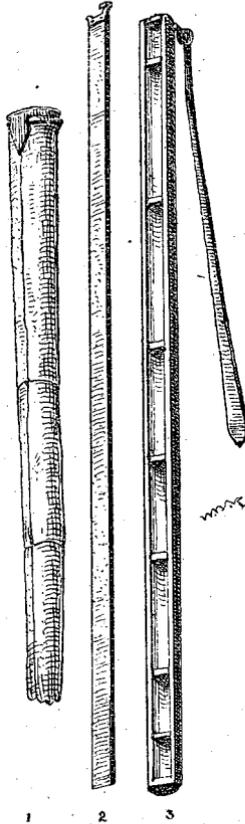
DESCRIPTION OF "BUTTER MEASURE."

The curious object here illustrated has for many years been described as "the measure for regulating the yard of butter," and has been preserved as the instrument used by the University officials when testing yards of butter in the local market. That it could be used for such a purpose is practically impossible, on account of the metal divisions which are placed at irregular distances within the trough, and also from the fact that the trough is not cylindrical, and that the butter would be flattened on one side when the cover of thin iron was in position.

To accurately state for what purpose it was originally intended is very difficult, but it has the appearance of being an apparatus for measuring liquids contained in casks, the long handle, opening by a hinge from the end, would enable the operator to insert the measure into the bung-hole without the effort of stretching across the barrel. The measure, which is made of thin blackened iron, is in fair preservation, but the lower end of the sheath has rotted away and disappeared.

The sketches represent: No. 1. The remains of the sheath, of thin iron, being the receptacle for the measure when not in use. No. 2. A strip of iron for sliding into the upper side of

the trough. No. 3. The measure, which is $32\frac{1}{2}$ inches long. It consists of a kind of shallow trough divided at unequal distances by pieces of metal, and having at the back, on the top, a long handle which works on a rounded hinge.



The Reverend H. P. STOKES, LL.D., of Corpus Christi College, then read a paper

ON THE OFFICE OF THE UNIVERSITY CHAPLAINS AND
THE SITE OF THE CHAPEL¹.

Remarks on this valuable paper were made by Mr J. W. CLARK, Mr J. E. FOSTER, and the SECRETARY.

¹ This paper has since been expanded and used as No. XLI of the Society's "Octavo Publications."

17 November, 1904.

The members of the Society were invited to be present at a lecture delivered on this day by Sir RICHARD TEMPLE, Bart., C.I.E.,

ON THE PRACTICAL VALUE OF ANTHROPOLOGY.

We are gathered to-day to welcome the establishment at this University of a Board of Anthropological Studies¹, the object of which is to add a working knowledge of mankind to the equipment of those already possessed of a matured, or at least a considerable, acquaintance with science or literature generally. The aim is, in fact, to impart a human interest to scholarship or to scientific attainment, which are otherwise apt to become mere exercises of the intellect:—an aim rendered practicable by the research and study, in certain directions, during quite recent years, of a number of independent students, hailing from all parts of the civilized world. The particular directions in which Anthropological Science has thus been developed, to an extent that has obtained for it a recognised and important position among the sciences, are in Archæology, Ethnology, and Physical and Mental Anthropology. The archæologists have included enquiries into Prehistoric and Historic Anthropology in their researches, the ethnologists have included Sociology, Comparative Religion, and Folklore, while Mental Anthropology covers a study of the whole field of psychological investigation.

Now, when we are started on a new line of research, when we add a new course of studies to a University curriculum, there is a question that we cannot help facing—a question, in fact, that ought to arise—What is the good of it all? What is the good of Prehistoric Anthropology, for instance, or of Comparative Religion, to an undergraduate about to undertake a course of study, which is to enable him to embark fittingly on the practical affairs of life? This is the problem that it is proposed to tackle now.

Let us commence a survey of the trend of this last development of scientific effort with a truism. Every successful man has to go on educating himself all his life, and the object of a University training is to induce in students a habit of self-education, which is in the future to stand them in such good stead. Before those freshly passed through an English University there is a very wide field spread. Year by year whole batches of them are destined to go forth to all parts of the world to find a liveli-

¹ Appointed by Grace, 26 May, 1904, comprising a Report (dated 12 May) of a Syndicate appointed to consider a Memorial on the Study of Anthropology. See *Cambridge University Reporter*, pp. 806, 888.

hood ; to find places where work, lucrative, dignified, and useful, awaits them ; to find themselves also in a human environment, strange, alien and utterly unlike anything in their experience. It is a fair question to ask :— Will not a sound grounding in anthropology be a help to such as these ? There is a pater saying :—The proper study of mankind is man. Will not a habit, acquired here, of systematically pursuing this study, of examining intelligently, until their true import is grasped, customs, modes of thought, beliefs, and superstitions, physical and mental capacities, springs of action, differences and mutual relations, and the causes leading up to existing human phenomena, be of real value to the young Englishmen sent among aliens ? Will it not be a powerful aid to them in what is called ‘understanding the people’ ?

And do not let us run away with the idea that such knowledge is easily or quickly acquired, because one is in the environment. There is another pater saying : ‘One half the world does not know how the other half lives.’ This is applied to, and is only too true of those who belong to the same religion, who have been born, as it were, with the same social instincts, and are endowed presumably with the same mental and physical capacities. How many English Roman Catholics, living among Protestants, could tell one, on enquiry, anything of practical value as to Protestant ideas, and *vice versa* ? How many of the gentry can project themselves successfully into the minds of the peasantry ? And how many peasants understand the workings of the gentleman’s mind, or the causes leading to his actions ? How often do masters complain of the utter misunderstanding of themselves exhibited in the comments of their servants ? But do they always, in their turn, understand the actions of their servants ? Do masters always grasp why the most faithful and honest of menials may also be confidently predicted in given circumstances to be unblushing liars ? Do the upper classes have a clear conception of the reason why the lower orders will scrupulously see fair play in some circumstances, but be incapable of fair play in most others ? It is the same all the world over. Lifelong neighbours among Hindus and Muhammadans living chock-a-block in the same street usually know nothing of each other’s ways. Again, every Indian talks of ‘caste,’ but there is nothing more difficult than to get information of practical value from an Indian about any caste, except his own, though the instinct of caste is so strong in the people that new ‘castes’ inevitably spring up in new communities, when these are faced with novel social conditions. So strong, indeed, is it, that Muhammadan ‘castes’ abound, despite this condition being a contradiction in terms, and even the native Christians of India are frequently by themselves, and usually by others, looked upon as belonging to a ‘caste.’

We often talk in Greater Britain of a ‘good’ magistrate or a ‘sympathetic’ judge, meaning thereby that these officials determine the matters before them with insight, that is, with a working anthropological knowledge of those with whom they have to deal. But observe that these are

all phenomena of human societies with identical social instincts, showing the intense difficulty that individuals of the human race have in understanding each other. Pondering this, it will be perceived what the difficulties are that await him of an alien race, who essays to project himself into the minds of the foreigners, with whom he has to deal and associate, or whom he has to govern : an attempt that so many who pass through an English University must have to make in this huge Empire of ours. If such an individual trusts to his own unaided capacities, a mastery of his business will come to him but very slowly and far too late. It is indeed everything to him to acquire the habit of useful anthropological study before he commences, and to be able to avail himself practically and intelligently of the facts gleaned, and the inferences drawn therefrom, by those who have gone before him.

At the same time it is of the highest importance personally to men of all kinds, who have dealings of the superior sort—such as it is presumed young men trained here are destined to have—with those with whom they are thrown at home, and more especially abroad, to be imbued with as an intimate a knowledge of them as is practicable. It matters nothing that they be civil servants, missionaries, merchants, or soldiers. Sympathy is one of the chief factors in successful dealings of any kind with human beings, and sympathy can only come of knowledge. And not only also does sympathy come of knowledge, but it is knowledge that begets sympathy. In a long experience of alien races, and of those who have had to govern and deal with them, all whom I have known to dislike the aliens about them, or to be unsympathetic, have been those that have been ignorant of them ; and I have never yet come across a man, who really knew an alien race, that had not, unless actuated by race jealousy, a strong bond of sympathy with them. Familiarity breeds contempt, but it is knowledge that breeds respect, and it is all the same whether the race be black, white, yellow, or red, or whether it be cultured or ignorant, civilised or semi-civilised, or downright savage.

Let me quote what is now another glib saying :—' One touch of nature makes the whole world kin.' It is necessary to grasp the truth underlying this, if one would succeed. Who is the better or more useful regimental officer than he who knows and sympathises with his men, who knows when to be lenient and when to be strict, when to give leave and when to refuse it, when a request for a favour is genuine and when it is humbug, when treatment is disciplinary and when it is merely irritating ? And what British officer in charge of British troops will achieve this sympathy, but he who takes the trouble to know them ? But place a British officer with local troops : take him to Egypt, the Soudan and Uganda, to Nigeria and the Gold Coast, to Rhodesia and South Africa, to India and Burma, to the Straits Settlements and China, to the West Indies and the Pacific Islands, and put him in charge of regulars, irregulars, or police. Who will so well bring about the all-essential sympathy

between himself and his men, as he who has acquired a habit, till by reason of his early training it has become a pleasure to him, of finding out all about them?

Take the merchant, trader, squatter, planter, or dealer of supplies to alien races. Who is successful in commerce but he who finds out where the market is, and having found the market, knows how to take advantage of it and what to avoid? In seeking a market, the habits, ways, predilections, and prejudices of many kinds of people have to be learnt, and this is the case in a much higher degree in preserving the market when found. Practically nearly all the blunders made by British manufacturers in supplying foreign markets, and mistakes made by British merchants whereby markets have been lost, have been due to ignorance of the local inhabitants; and others have been due to their own pride, born of the same ignorance. 'We have always made the article in this way in the past for home consumption, and we are not going to make it in any other way for the foreigner,' is an argument that has lost many markets. But it is hopelessly wrong. No foreigner has ever taken what he did not happen to like, and no foreigner ever will. No one who has a knowledge of mankind generally would think so. The civilised will have things exactly to their liking, and it cannot be too clearly impressed on the trading community that this prejudice is even more strongly characteristic of the savage and the semi-savage. Beads as beads do not appeal to the savage, but it is a particular kind and form of beads that he wants for reasons of his own, practical enough in their own way—and so on through every article of trade.

It is here that what one may call 'the anthropological habit' will come to the aid of those engaged in commerce, and an anthropological training in youth will certainly not tend to the diminishing of later profits. It is a common commercial saying that trade accommodates itself to any circumstances. So it does; but he who profits first and best is he who knows the most of mankind and its ways. Many successful mercantile firms with a foreign trade have not been slow to appreciate this truth. Taught by the spectacle of unlooked-for failures, there have been firms which have long since insisted on their youngsters acquiring a knowledge of the local languages and of the local peoples. This insistence has often been of the highest profit to them. As one instance of its value among many, let me quote the case of a well-known firm which took to supplying, as an essential part of its work, the wax candles used at Buddhist shrines, temples, and ceremonies. This proved a wide and profitable field for enterprise, because the candles were made in the right way, which right making came of anthropological knowledge of more than one kind, and of more than one place and community.

It is not only direct knowledge that is necessary to the merchant, and I will give an instance where mercantile bodies have found a kind of knowledge that is apparently remote as regards their business to be of

paramount importance to them. A few years ago I made efforts to establish a series of wireless telegraphic stations in the Bay of Bengal, which are, I believe, about to bear fruit, partly on account of the value of the meteorological information that could be gathered in time to be of practical daily use to the immense amount of shipping traversing the Bay in all directions. I found that among my strongest supporters were the great Chambers of Commerce, not only in the shipping interests, but in those of general commerce also. One can readily understand the value of trustworthy weather forecasts to the great agricultural industries depending on a heavy rainfall, such as rice, jute, and sugar, but their value to the dealers in cotton cloth is not so apparent. These dealers, however, had found out that the success of such crops, out of which the millions made their living, depended on the rainfall, and that on the success of the crops depended the purchasing power of the millions, and that on that depended the quantity of the stuffs, which could be profitably exported from year to year. Consequently there were no more anxious students of the meteorological returns than the manufacturers and merchants of dry goods in far-away England, and no set of men to whom accurate meteorological information was of higher value.

Now, the point I would like to drive home from this object lesson is that the apparently remote study of anthropology, in all its phases, is of similar value. The habit of intelligently examining the peoples among whom his business is cast cannot be overrated by the merchant wishing to continuously widen it to profit. It may be said that the kind of knowledge above noted can be, and often has been in the past, successfully acquired empirically by mere quickness of observation. Granted: but the man who has been obliged to acquire it without any previous training in observation, is heavily handicapped indeed in comparison with him who has acquired the habit of right observation, and what is of much more importance, has been put in the way of rightly interpreting his observations in his youth. This is what such a body as the Board of Anthropological Studies here can do for the future merchant.

Then there are the men who have to administer, the magistrates and the judges. One has only to consider for a moment what is involved in the term 'administration' to see that success here rests almost entirely on knowledge of the people. Take the universally delicate questions of revenue and taxation, and consider how very much the successful administration of either depends on a minute acquaintance with the means, habits, customs, manners, institutions, traditions, prejudices, and character of the population. And think over both the framing and working of the rules and regulations, under laws of a municipal nature, that affect the every-day life of all sorts and conditions of men. In the making of laws, too close a knowledge of the persons to be subjected to them cannot be possessed, and however wise the laws so made may be, their object can be only too easily frustrated, if the rules they authorise

are not themselves framed with an equally great knowledge, and they in their turn can be made to be of no avail, unless an intimate acquaintance with the population is brought to bear on their administration. For the administrator an extensive knowledge of those in his charge is an attainment, not only essential to his own success, but beneficial in the highest degree to the country he dwells in, provided it is used with discernment. And discernment is best acquired by the 'anthropological habit.' The same extent and description of knowledge is required by the judges and the magistrates in apportioning punishments, and by the judges in adjudicating effectively in civil cases. No amount of wisdom in the civil and criminal laws of the land in the British possessions will benefit the various populations, unless they are administered with discernment and insight.

To the administrator and the magistrate, and to the judge especially, there is an apparently small accomplishment, which can be turned into a mighty lever for gaining a hold on the people: the apt quotation of proverbs, maxims, and traditional verses and sayings. They are always well worth study. Quote an agricultural aphorism to the farmer, quote a line from one of his own popular poets to the man of letters, quote a wise saw in reproof or encouragement of a servant, and you cannot but perceive the respect and kindly feeling that is produced. Say to the North Indian, who comes with a belated threat: 'You should have killed the cat on the *first day*.'; stay a quarrel with the remark that 'when two fight one will surely fall'; repeat to one in trouble a verse from one of the Indian mediæval reformers; jingle a nursery rhyme to a child; quote a text from the Pali Scriptures to a Burman or a text from the Koran to Musalman; speak any one of these things with all the force, vigour and raciness of the vernacular, and you will find as your reward the attention arrested, the dull eye brightened, the unmistakable look that comes of a kindred intelligence awakened. The proverbs of a people do not merely afford a phase of anthropological study; they are a powerful force working for influence.

Let me take another class of men largely educated at the Universities, — a class which one would like to see entirely recruited from amongst those who have been subjected in early life to the University method of training, — the missionaries. Now, what is the missionary in practice required to do? He is required to bring about in alien races a change of thought, which is to induce in them what we consider to be a higher type of faith and action than their own religion or belief is capable of inducing. There is perhaps no more difficult task to accomplish than this, on a scale that is to have a solid effect on a population, and surely the first requisite for success is that the missionary himself should have an insight into three mental characteristics, at any rate, of those he is seeking to convert: that is to say, into their customs, their institutions, and their habits of thought. That this applies with tremendous force in the case of civilised

peoples is obvious, on very slight consideration, but it is possibly not equally well understood that it is no less applicable in reality in the case of the semi-civilised, and even of the untutored savage. There is perhaps no human being more hidebound by custom than the savage. It should be remembered that custom is all the law he knows. Custom, both in deed and thought, represents all the explanation he has of natural phenomena within his ken. It controls with iron bands all his institutions, —and the customary institutions of savages are often complicated in the extreme, and govern individual action with an irresistible power hardly realisable by the freer members of a civilised nation. Let anyone dive seriously, even for a little while, into the maze of customs connected with tabu, or with the marriage customs,—laws if you like—of the Australian aborigines or of the South Sea Islanders, and he will soon see what I mean.

So far as regards civilised peoples, what individual of them is not bound and hampered by custom and convention in every direction? From what does the civilised woman, who, as we say, falls, suffer most? From the law or from custom? What is her offence? Is it against law? Or, is it against convention? If it were against law, would the law pursue her so long, so persistently and so relentlessly as does custom? I quote this as an incontrovertible example of the irresistible nature of public feeling among our own class of nations. Well: among vast populations the most heinous offence, the one offence customarily unpardonable, is to become a pervert to the faith, that is, to become a convert to Christianity. Some here present may have seen the result of committing that offence. I can recall a case in point. I knew a medical man, by birth a Brahman and by faith a Christian, with an European education. What was his condition? His habits were not English, and he could only associate on general terms with English people, and then he was an outcast from his own family and people, in a sense so absolute that a Christian realises it but with difficulty. That was a lonely life indeed, and few there be of any nation that would face it. But mark this. He was ostracised, not because of any crime or any evil in him that made him dangerous, but because of custom and the fear of breaking through custom on the part of those connected or associated with him. One of the saddest of creatures in my experience was a servant of my own, who had been what is known in India as a child 'caste widow.' She had nevertheless married a Muhammadan and become a Muhammadan, her own kind and religion being in the circumstances impossible to her, and she paid the penalty of isolation from her home all her life. These are the instances and these are the considerations which show how serious a personal matter it can be to change one's mother faith.

Of course it has been done over and over again, and missionaries have succeeded with whole populations, but in every case success has been obtained by working on the line of least resistance, and has been the

reward of those who have exercised something of what we call the wisdom of the serpent in ascertaining that line. This involves a most extensive knowledge of the people ; and their work and writings prove how closely the great missionaries of all sorts have studied those amongst whom their lot has been cast, in every phase. It has always and everywhere been so. The varying festivals of Christianity in Europe, its many rituals and its myriad customs, show that the missionaries of old succeeded by adapting to their own ideals, rather than by changing, the old habits they found about them. In the East, the Buddhists were in ancient days, and nominally still are, great missionaries, and they have invariably worked on the same lines. I have also elsewhere had reason to point out that in the present day the most successful missionary in India is, after all, the Brahman priest, and that because he apparently changes nothing, accepts the whole hagiolatry and cosmogony of the tribe he takes under his wing, declares the chief tribal god to be an emanation from the misty Hindu deity Siva, starts a custom here and a ceremony there, induces the leaders to be select and particular as to association with others, and as to marriages, eating, drinking, and smoking, and straightway is brought into being a new caste and a new sect, belonging loosely to that agglomeration of sects and small societies known generically as Hinduism. The process can be watched wherever British roads and railroads open up the wilder regions.

All this is working tactfully, and because tact is instinctive anthropological knowledge, it is working anthropologically, and wherever, without the immediate aid of the sword and superior force, any other method is tried,—wherever there has been a direct effort to work empirically,—wherever a sudden change of old social habits has been inculcated,—there has been disaster, or an unnecessary infliction of injury, or a subversion of the constituted social system, or an actual conflict with the civil authority. Mischief, not good, comes of such things. I remember, many years ago, having cause to examine the religious ideas of a certain Indian tribe, and being advised to consult a missionary, who had lived with it for about twenty-five years. I wrote to him for my information, and the answer I received was that he could not give it, as his business was to convert the heathen to Christianity, not to study their religion. Such a man could not create a mission station, and was not likely to improve one placed in his charge. Another instance of the wrong spirit, born of anthropological ignorance, comes to light in the existence of certain all-important provisions in Acts of the Indian Legislature and in judicial decisions affecting Indians, which prevent a change of religion from affecting marriages celebrated, and the legitimacy of children born, before the change, and prevent reliance on customs opposed to the newly adopted religion. Men have become Muhammadans in order to apply the Muhammadan law of divorce to former wives, as they thought legally, and men have become Christians in order to get rid of superfluous wives and

families, and—what is to the point here—Christian converts have been advised by their pastors to put away extra wives. Think of the cruel wrongs which would thus have been inflicted on lawfully married women and lawfully begotten children, and the wisdom of the legislature and of the judges will be perceived. But the strongest instance I can recall of the results of anthropological ignorance is the sad case of the Nicobar Missions in the Bay of Bengal. Off and on for two hundred years, missionaries of all sorts and nationalities attempted conversion and colonisation of these islands. They were well intentioned, enthusiastic, and in a sense truly heroic, and some of them were learned as well, but they were without practical knowledge and without proper equipment. Their lives were not only miserable, but they were horribly miserable, and every mission perished. What is more, so far as I could ascertain after prolonged enquiry, their efforts, which were many and sustained, have had no appreciable effect on the people, indeed apparently none at all. And this has partly been due to an anthropological error. They worked with their own hands. It may seem a small thing, but with the population they dealt with it meant that they could secure no influence, and it is a truth that, wherever you go, if you are to have influence, you must have anthropological knowledge. There is a mission in the Nicobars now, and when I last heard of it it was flourishing, but the leader has been a contributor to the *Journal of the Anthropological Institute*, and has had it borne in on him that a knowledge of the people in their every aspect is essential to his success. Many a time has he used his knowledge to the practical benefit of the islanders, converts or other.

So far we have been discussing the case of those who dwell and work abroad. Let us now pay a little attention to that of a very different class, the arm-chair critics, academical, philosophical, political, pragmatic, doctrinaire—those gentlemen of England that live at home at ease. It is a commonplace amongst Anglo-Indians that the ignorance of the home-stayer of India and its affairs is not only stupendous: it is persistent and hopeless, because self-satisfied. But the home criticism is of great importance, as the ultimate power for good and evil lies at the headquarters of the Empire. It must be so: and what is true of India is true also of any other outlying part of the world-wide dominion of the British race. But do the glib critics of England pause to dwell on the harm that severe criticism of their fellow-countrymen abroad often does? Do they stop to consider the pain it causes? Or to ponder on the very superficial knowledge on which their strictures are based? Or to think that there is no adverse criticism that is more annoying or disheartening than that which is wholly ignorant, or springs from that little knowledge which is a dangerous thing? Indeed, the chief qualification for a savage onslaught on the striver at a distance is ignorance. He who knows and can appreciate, is slow to appreciate, as he understands the danger. I do not wish to illustrate my points too profusely out of my own experience, but on the

whole it is best to take one's illustrations, so far as possible, at first hand, and I will give here an instance of advice tendered without adequate anthropological instruction. For some years I had to govern a very large body of convicts, among whom were a considerable number of women. Some pressure was brought to bear on me among others from England, to introduce separate sleeping accommodation among the women, on the intelligible grounds that it is well to separate the unfortunate from the bad, and that in England women who had found their way into gaol, but were on the whole of cleanly life, highly appreciated the privilege of sleeping apart from those whose lives, thoughts and speech were otherwise. But I avoided doing this, because the Indian woman in all her life, from birth to death, from childhood to old age, is never alone, especially at night, and if you want to thoroughly frighten the kind of woman that finds herself in an Indian prison, force her to sleep, or to try to sleep, in a solitary cell, where her wild superstitious imagination runs riot. It is an act of torture.

Now, those who fill posts that bring them constantly before the public eye soon become callous to the misinterpretation that dogs the judgment of the ill-informed critic. They are subjected to it day by day, and the experience early comes to them that it does no personal harm. But the case is quite different with men who lead solitary lives on the outskirts of the Empire, surrounded by difficulties not of the ordinary sort, and working under unusual conditions. The loneliness tries the nerves and leads to brooding, and then the unkind word, the thoughtless criticism, wounds deeply. It disheartens, discourages, and takes the zest and spirit out of the worker. To test the truth of this, let any stay-at-home quit the comfortable walls of this hub of a mighty Empire and go out on to the bare tyre thereof, and see for himself. There is probably no kind of worker abroad, though he is only too often guilty of it himself, who suffers more from ignorant criticism than the lonely missionary, and he is so placed that he cannot ignore it.

Even those, who should be thicker of skin, often do not escape the soreness caused in this way, and I cannot forget the heart-burning that arose on the spot, during the very difficult pacification of the country after the last Burmese War, out of the relentless criticism set up at home with so little knowledge, though there must have been many who must have known that the treatment they received but repeated that meted out to the controllers of the operations in the previous war. One of the most pathetic of public speeches is that of General Godwin, at Rangoon, shortly before his death, referring to the ruthless persecution to which he had been subjected for his conduct of the war of 1852. It has always been so. Read about the Peninsular Campaigns, the Sikh Wars, the so-called Sale of Kashmir, and again about the late South African War, and the present struggle in the Far-East. The remarks one sees in the daily Press are uninformed enough in all conscience, but they have, all the same, evidently

wounded at times even so collected a people as the Japanese. The point is, then, that ignorant criticism does harm, even in the case of the experienced in human affairs.

To show how easy and even natural it is to judge wrongly, let me quote as an example the unjust attacks that have often been made, by missionaries among others, upon those who have had truck with savages. Savages within their limitations are very far from being fools, especially in the matter of a bargain with civilised man, and never make one that does not for reasons of their own satisfy themselves. Each side in such a case views the bargain according to its own interest. On his side the trader buys something of great value to him, when he has taken it elsewhere, with something of small value to him, which he has brought from elsewhere, and then he can make what is to him a magnificent bargain. On the other hand, the savage is more than satisfied, because with what he has got from the trader he can procure from amongst his own people something he very much covets, which the articles he parted with could not have procured for him. Both sides profit by the bargain from their respective points of view, and the trader has not as a matter of fact taken an undue advantage of the savages, who as a body part with products of little or no value to themselves for others of vital importance, though of little or none to the civilised trader. The more one dives into the recorded bargains with savages the more clearly one sees the truth of this view. Taking advantage of the love of all savages for strong drink to conclude unconscionable bargains, by which they part with their produce for an insufficient quantity of articles of use to them, is another matter, and does not affect the argument.

Every administrator of experience can recall many instances of conventionally wrong judgments, even in high places, on public affairs abroad, based on anthropological misapprehension; but one of the most humiliating in my own recollection was the honest, but doctrinaire and pragmatic, onslaught in England on the Opium Traffic of India, whereby, if it had succeeded, some entire populations would have been deprived of those little but very highly prized comforts assured in overcrowded agricultural localities by the cultivation of opium, and others of the most valued prophylactic they possess against physical pain and suffering by its medicinal consumption. In both cases it is this much abused product of the fields that enables the very poor in large areas to keep their heads above water, so that their not very happy lives may be worth living.

There is another most venerable anthropological error, quaintly expressed by a seventeenth-century writer on Greenland, who describes that country 'as being so happy as not to know the value of gold and silver.' It is to be found all the world over and in all times. It is expressed in Ovid's hackneyed lines :—

Effodiuntur opes, irritamenta malorum.

Jamque nocens ferrum, ferroque nocentius aurum

Prodierant.

But it is based on a misunderstanding of the ways of mankind in given circumstances. Barter, sale, and purchase must go on, whether there is money in the land or not, and an examination of the state of commercial business in any country in pre-coinage days will soon convince the student that the opportunities for unfair dealing, where the value of gold and silver for currency has not been discovered, are just double those where money exists; and opportunity is the mother of sin. The actual monetary condition of a country without a definite and settled currency and without the bullion metals is not by any means of that desirable simplicity, which civilised man is, without due thought, so apt to attribute to savages and semi-savages. Simplicity in dealings can only exist where money consists of a recognised coinage, and where wealth is expressed in terms of that coinage. Indeed, the invention of money, based on the metallurgical skill which can produce from the ore gold and silver of a fixed fineness, is one of the mightiest triumphs of the human brain, and one of the most potent blessings evolved by man for the benefit of his kind.

But mischievous as uninformed criticism is, there is nothing of greater value and assistance than the criticism of the well informed. Lookers on see most of the game, provided they understand it. That is just the point. They must understand it to perceive its drift and to forward it by useful comment. By learning all about it, by viewing it at a distance, by the very detachment and general grasp that a distant view secures, the critic at home can materially help the worker abroad. Comment made with knowledge never offends, because it is so very helpful. It cheers, it invigorates, it leads to further effort, it creates a bond of sympathy between the critic and the criticised. It does nothing but good. In this immense Empire it means that all, from the centre of the hub to the outer rim of the wheel, can work with one mind and one mighty effort, with one strong pull together, for the magnificent end of its continued well-being. Therefore it behoves the critic at home of all men to cultivate the anthropological instinct.

Let us now turn to another class, such as this University is preeminently capable of affording: the professors, the lecturers, the teachers and leaders of literary and scientific, not to mention anthropological, study. Let no one be filled with the idea that their labours, in so far as anthropology is concerned, are a negligible quantity, as only resulting in abstract speculation of no immediate and probably of no ultimate practical value. What the obscure calculations of the pure mathematicians, the inventions based on applied mathematics, and the deductions of the meteorologists have done for so eminently practical an occupation as navigation; what the abstract labours of the chemist and the electrician have done for the doctor; what the statistician and the actuary have done for such purely practical bodies as insurance companies and the underwriters; what the desk work of the accountant does for commerce and finance: that can the analyses of the anthropologist do for that large and important class of

workers which labours among men. Let not the remoteness of any particular branch of his subject from the obviously practical pursuits deter him, who spends his energies in research. Let him remember that, after all, the best instrument for approaching ancient and medieval history is abstract study of the ways and thoughts of the modern savage and semi-civilised man. Let him remember, too, that many of the customs and ideas of the most civilised and advanced of modern nations have their roots in savage and semi-civilised beliefs. What can be remoter at first sight from the navigation of an ocean steamer than logarithms? But let anyone who has reason to go on a long sea voyage keep his eyes open, and he cannot but perceive how important a part applied logarithmic calculations play in the sure pilotage of the ship he is in from port to port. And what is more to the effective point, let not the controllers of the University be turned back by any such considerations as apparent remoteness from pursuing the course they are now embarked on; rather let us hope that the tentative scheme we are now engaged in examining is but the first timid step towards the establishment of what will ultimately prove to be an important School of Applied Anthropology.

And if this University takes up this study in earnest, let me draw attention to another point. It is said in a thoughtful obituary notice of my old friend, the great Orientalist, Professor Georg Bühler, of Vienna, that not only was he a thorough scholar, a hard worker and a master of general Oriental learning, but that he had also the insight to perceive that judicious collections promote and even create those studies, the advancement of which he had at heart. In all such matters there must not only be the desire to learn, there must also be the opportunity, for if desire be the father, then assuredly opportunity is the mother of all learning. So he hunted up, collected, and presented to seats of learning every M.S. or original document his own financial capacity or his powers of persuasion permitted to himself or to others. Where the carcass is, there shall the eagles be gathered together. In the present case, if the students are to be attracted and encouraged, there must be collected together the Museum and the Library, a carcass fitted for their appetite. I do not say this in a mere begging spirit. Cast your thoughts over the great specialised schools of learning, present or past, and consider how many of them have owed their existence or success to the library or museum close at hand. It is a consideration worthy of the attention of the governing body of a University that these two, the library and the museum, are as important factors in the advancement of knowledge as teaching itself.

And now we come to the last, but not the least important point for consideration: the personal aspect of this question. We have been dealing so far with the value of an early anthropological training to a man in his work. Is it of any value to him in his private life? For years past I have urged upon all youngsters the great personal use of having a hobby and learning to ride it early, for a hobby to be valuable is not

mastered in a day. The knowledge of it is of slow growth. At first the lessons are a grind. Then until they are mastered they are irksome. But when the art is fully attained there is perhaps no keener pleasure that human beings can experience than the riding of a hobby. Begin, therefore, when you are young and before the work of the world distracts your attention and prevents or postpones the necessary mastery. But what is the use of the mastery? There comes a time, sooner or later, to all men that live on, when for one reason or another they must retire from active life, from the pursuits or business to which they have become accustomed, from occupations that have absorbed all their energies and filled up all their days. A time when the habits of years must be changed and when inactivity must follow on activity. Then is the time when a man is grateful for his hobby. By then he has mastered it. Its pursuit is a real pleasure to him. It is a helpful occupation as the years advance, and even when he can no longer push it on any further himself, he can take his delight in giving his matured advice and help to those coming up behind him, and in watching their progress and that of their kind with the eye of the old horseman.

And what better hobby exists than anthropology? Its range is so wide, its phases so very many, the interests involved in it so various, that it cannot fail to occupy the leisure hours from youth to full manhood, and to be a solace in some aspect or other in advanced life and old age. So vast is the field indeed, that no individual can point the moral of its usefulness, except from a severely limited portion of it. At any rate, I have learnt enough in an experience of a third of a century in its study to prevent me from going beyond my personal tether, though perhaps my lines have been cast in a favourable spot, for rightly or wrongly Anglo-Indian anthropologists consider India to be an exceptionally, though far from being the only, favoured land for study. In it can be observed still dwelling side by side human beings possessed of the oldest and youngest civilisations. In it can be traced by the modern eye the whole evolution of most arts and many ideas. For instance, you can procure in quite a small area of the country concrete examples, all still in use, of the whole story of the water pipe or hooka, starting from the plain cocoanut with a hole to suck the smoke through. You can then pass on to the nut embellished with a brass binding at the top, and next at the top and bottom, until it is found covered over with brass and furnished with a sucking pipe. Then you can find the nut withdrawn and only the brass cover remaining, but this requires a separate stand, like a miniature amphora. Then it is turned over on to its wider end and the stand is attached to it, and finally the stand is widened and enlarged and the vessel narrowed and attenuated to give it stability, until the true hooka of the Oriental pictures with its elegant and flexible sucking pipe is reached, which differs from a cocoanut in appearance as much as one article can be made to differ from another. Go and buy such things in the bazaars,

if you have the chance, and find out for yourselves how great the interest is.

Sticking to my own experience, for reasons given above, and leaving it to my hearers to follow the line of thought indicated from theirs, let me here give an instance or so of the pleasures of research. In Muhammadan India especially there are many cases, some beyond doubt, of the marriage of daughters of royal blood, even of the most powerful sovereigns, to saintly persons of no specially high origin. It is to Europeans an unexpected custom, and is not the finding of the explanation of interest to the discoverer? In the contemporary vernacular history of the Sixteenth Century Dynasty of the Bahmanis in Southern India, we read that Sultan Muhammad Shah Bahmani gave two sisters in marriage to two local saints, with a substantial territorial dowry to each, 'for the sake of invoking the divine blessing on his own bed.' An Indian anthropologist sees at once in this what the native line of thought has been. The custom is simply a nostrum for procuring sons. The overwhelming hankering after a son in India is of Hindu origin, based on the superstition that the performance of funeral obsequies by a son is a sure means of salvation. The desire has long become universal there, and the whole wide category of nostrums known to the inhabitants is employed by the barren or the sonless to overcome their misfortune. This is one of them.

Again, is it not of interest to trace out the origin of the well-known customary ill-treatment of Hindu widows in India, ill-treatment of relatives being so foreign to a class with such strong family feelings as the Hindus? Work it out and you will find that this is an instance of the quite incalculable misery and suffering caused to human beings, that has for ages arisen out of 'correct argument from a false premiss.' The theory is that misfortune is a sin, and indicates a sinful condition in the victims thereof, defining sin as an offence, witting or unwitting, against social conventions. The good luck of the lucky benefits their surroundings and the bad luck of the unlucky as obviously brings harm. Therefore the unlucky are sinful, and what is of supreme importance to them, must be punished accordingly; as a precautionary measure for their own safety on the part of those around them. The fact that, as in the case of widows, the misfortunate is perfectly involuntary and uncontrollable does not affect the argument. This in its turn has given rise to an interminably numerous and various body of nostrums for the prevention of the dreaded sin of misfortune, and a cumulative ball of folk-custom has been set rolling.

Take again the ancient royal prerogative of releasing prisoners on customary occasions of personal royal rejoicing, nowadays in civilised Europe attributed solely to kindness and mercy. This is, in Indian song and legend, given, in the directest phraseology, its right original attribution of act to insure good luck. Is not this of interest also?

Now, these ideas, and with modifications these customs, are not confined to India, and the interest provided by all such things is their universality among human beings, pointing to the existence of a fundamental principle, or Law of Nature, which I have elsewhere endeavoured to develop in propounding the principles underlying the evolution of speech: namely, that a convention devised by the human brain is governed by a general natural law, however various the phenomena of that law may be. Controlled by their physical development human brains must in similar conditions, subject to modifications caused by the pressure of two other fundamental natural laws, think and act in a similar manner.

As a concrete example, let us take the idea of sanctuary, asylum, or refuge, as it is variously termed. Wherever it is found, in ancient and modern India, in ancient Greece, in medieval Europe, in modern Afghanistan, its practical application is everywhere the same: protection of the stranger against his enemy, so long as he pays his way, and only so long. Pursuing this universal idea further, it will be seen that the Oriental conception of hospitality and its obligations is based on that of sanctuary, and is still, in many instances, not distinguishable from it. The practical reflection: You scratch my back and I will scratch yours, is at the bottom of all this, however far final developments in various places may have diverged from it.

Work out the idea of virtue, which for ages everywhere meant, and still in many parts of the earth means, valour in a man and chastity in a woman, being nowhere dead in that sense, as the modern European laws relating to martial and conjugal fidelity show, and you will find that it rests on very ancient conditions of society. The men preserved themselves by their valour and the women preserved their tabu to the men by their chastity. It was so everywhere. The zone as a term and as an article of costume shows this. There was always the female girdle or zone, the emblem of chastity, and the male zone, or sign of virility and fighting capacity.

Then there is the royal custom of marriage with a half-sister, found in ancient Egypt, in the modern Malay States, and in the quite lately deposed Dynasty of Burma and elsewhere. This is not mere incest, itself an idea based in many an apparently queer form on a fundamental necessity of human society. It is and was a matter of self and family protection, to be found in a much milder form in the familiar English idea of the marriage of heir and heiress to preserve the 'ring fence.'

Take the custom of succession of brothers before sons, found in old England, in Burma, in some of the Indian mediated States, and in other places, and we have again a custom arising out of the environment: the necessity of providing a grown man to maintain the State. And so one could go on to an indefinite multiplication of instances.

But in unworked-out directions, unworked-out, that is, so far as known to myself, the interest and principles are the same. Let me give an

instance to which my attention was some years ago attracted, though I have not yet had the leisure to follow it to a satisfactory conclusion. At Akyab on the Arakan-Burma Coast is a well-known shrine, nowadays usually called Buddha-makān. It is repeated conspicuously further South at Mergui, and inconspicuously elsewhere along the coast. The name is an impossible one etymologically. Investigation, however, showed that the devotees were the Muhammadan sailors of the Bay of Bengal, hailing chiefly from Chittagong, and that the name was really Badr-maqam, the shrine of Badr, corrupted in Buddhist Arakan into Buddha-makān, the house of Buddha, by folk-etymology striving after a meaning. The holy personage worshipped was Badru'ddīn Aulia, who has a great shrine at Chittagong, and is the patron saint of the sailing community. Badru'ddīn, as a name, is our old familiar friend Bedreddin of the popular English versions of the *Arabian Nights*. This Badru'ddīn Aulia is one of the misty but important saints, those will-o'-the-wisps of Indian hagiolatry, who is mixed up with another, the widely known Khwāja Khizar, *par excellence* the Muhammadanised spirit of the flood: and here is the immediate explanation. But Khwāja Khizar is mixed up with Mehtar Ilias, the Muhammadan and Oriental form of the prophet Elias of the legends, to be traced in the same capacity in modern Russia. This god, and in some places goddess, of the flood is traceable all over India, even amongst the alien populations of Madras. We are now involved in something universal, something due to a line of popular inductive reasoning. Will it not repay following up, as a matter of interest, and probing to the bottom by a mixed body of investigators, Oriental and Occidental, in the same manner as Indian epigraphical dates and the eras to which they refer were, several years back, worked out and settled by scholars, mathematicians, and astronomers working together?

A study of the highest anthropological interest is to be found in an examination of currency and coinage, and of the intermingled question of weights and measures. Perhaps nothing leads to so close a knowledge of man and his ways of life and notions, and perhaps no subject requires more sustained attention, or a greater exercise of the reasoning powers. Here, too, there is a universal principle, to be unearthed out of the immense maze of facts before one, for, as in the case of the days of the week, there is a connected world-wide series of notions of the penny-weight, ounce, pound, and hundredweight, and of their equivalents in cash, based on some general observation of the carrying capacity of a man and of the constant weight of some vegetable seed, and also of the value of some animal or thing important to man. Here, too, a combination of Oriental and Occidental research and specialised knowledge is necessary.

But experience will show that in following up all such subjects as these, there are two laws of Nature, in addition to that of the fundamental community of human reasoning, which must never be lost sight

of, if the successful elucidation of an anthropological problem is to be achieved. These laws are that there is no such thing as development along a single line only. Everything in Nature is subjected to and affected by its environment. A little is picked up here, and snatched there, and what is caught up becomes engrafted, with the result that the subsequent growth becomes complicated, or even diverted from its original tendency.

Bear these principles in mind and work continuously as opportunity offers, and it will be found that anthropology is a study of serious personal value. Not only will it enable the student to do the work of the world, and to deal with his neighbours and those with whom he comes in contact, throughout all his active life, better than can be otherwise possible, but it will serve to throw a light upon what goes on around him, and to give an insight into human affairs, past and present, that cannot but be of benefit to him, and it will provide him with intellectual occupation, interest and pleasure, as long as the eye can see, or the ear can hear, or the brain can think.

28 November, 1904.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

The evening was devoted to the exhibition of numerous objects of interest, some of which had been added to the Museum.

Remarks were made by the PRESIDENT, Mr W. B. REDFERN, and others.

26 January, 1905.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

Sir R. S. BALL, M.A., Lowndean Professor, exhibited views of Irish Antiquities which he had taken during his recent cruise round Ireland with the Commissioners of Irish Lighthouses.

30 January, 1905.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

ERNEST HANBURY HANKIN, M.A., of St John's College, delivered a lecture, illustrated by lantern-slides, upon

ARABESQUE DESIGN, ITS ORIGIN AND APPLICATIONS¹.

¹ This lecture has since been printed in the *Journal of the Society of Arts*, No. 2730, Vol. LIII., 17 Mar. 1905.



FIG. 1. A Marken House with gable decoration
(from a photograph by the writer).

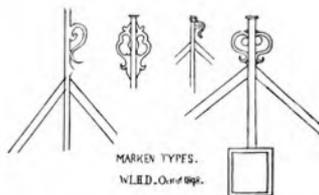


FIG. 2. Gable decorations on Marken houses.

6 February, 1905.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

The Reverend W. G. SEARLE, M.A., of Queens' College, read a paper on

THE COINS OF THE BRITONS.

Professor RIDGEWAY criticised the conclusions advanced by Mr Searle.

W. L. H. DUCKWORTH, M.D., of Jesus College, read a paper on

GABLE DECORATIONS IN MARKEN ISLAND.

Marken Island is so well-known that it is perhaps unnecessary to explain that it is situated in the Zuyder Zee, about two miles from the mainland, and opposite the Dutch village of Monnikendam. The island is frequently visited during the summer months, by tourists from Amsterdam; and to judge from the annoyance exhibited by the fisher-inhabitants at the sight of a camera, one concludes that their picturesque dress has too often attracted the attention of itinerant photographers.

It may perhaps be well to mention that Virchow saw in the inhabitants of Marken, as well as in those of Urk and Shokland (two other islets in the Zuyder Zee), the purest modern representatives of the Batavians described by Tacitus. At one time too, it was suggested that these Batavians are slightly modified and direct descendants of the race to which the Neanderthal-skeleton has given a name. But in view of the recent work of Schwalbe, this theory must needs be abandoned.

The object of the present note is not, however, to discuss the physical characters of the Marken Islanders, for it deals with certain features of their dwellings.

A marked characteristic of the houses of Marken Island is the almost universal occurrence of decorative emblems, at the gable ends (Plate XI, fig. 1). The appearance of some of those decorations is shewn in the illustrations (Plate XI, fig. 2, and

fig. 5, no. 2) and it will be noticed that in each case there is a central pole or staff, with laterally-symmetrical wood-carvings. The pole is fixed, and is rendered secure against the gales which must be severely felt in Marken, by attachment to the window-frame. The following notes refer to the significance of the decorative emblems, and of the wood-carvings at the sides of the central staff.

I. The subject of gable decorations has already an extensive literature, to which some references are given at the end of this note. It may here suffice to say that one of the most usual objects with which gables have in times been adorned, by the early inhabitants of Europe, is the head of a horse. It might be either the actual head of the animal, though sometimes the skull was substituted, and in still more recent times carved wooden representatives of the head took the place of the real object.

The reasons for thus decorating the gable seem to have been various. Thus it is alleged that the emblems may have served simply to protect from decay the ends of the poles which crossed each other to form the gable. Again, it is suggested that the superstitious awe and reverence with which the horse was regarded, led to a belief in magical powers invested in that portion of its anatomy, so that the object in view, in placing the head on the gable, was protection from evil influences, or else satisfaction of the claims of powerful deities whom the sacrifice of a horse might propitiate; or yet again, as Mr Speth has suggested, the head might represent the corpse of an animal which had been sacrificed on the foundation stone of the house.

Though most frequent among the Teutonic inhabitants of Northern Europe, the custom was not confined to these; indeed, as Mr Thomas and others have shewn, similar customs are of world-wide distribution¹.

¹ *Folk-Lore Journal*, Vol. XI. 1900. Thomas quotes Petersen's work, and shews several examples of the gradual modification and tendency to conventionalisation of a motive when successively copied. Some of the Russian examples are of interest (especially those from Nijni-Novgorod) in connection with the present note.



FIG. 3. Old Saxon farm-house in Holstein, with gable decorations of the horse-head type (from a photograph by the writer).



FIG. 4. Old Saxon farm-house in Holstein, with gable decorations of the staff type (from a photograph by the writer).

Previously to my visit to Marken, I had been engaged upon observations on the gables of Holstein (Plate XII, figs. 3 and 4), and in perusing Dr Lenz' useful memoir, I noticed the tendency to preserve even in very conventionalised horse-heads in Holstein, the ears of the animal. So much so, that when I saw the curious little prominences of the Marken emblems, I recognised this feature at once, and it became clear that while the ears are thus represented, the discs or prominences (fig. 2) were originally the heads, and in the outer curved portion of the tracery the arching neck has been retained. These emblems are thus the degenerate remains of two horse-heads which originally faced each other.

To complete the demonstration, I have arranged my drawings of the Marken decorations in series with those published by Dr Lenz. The diagram (fig. 5, p. 244) needs but little explanation, but it is necessary to add that the series is an evolutionary one, and that evolution is represented as progressing in two directions, *i.e.* along both the horizontal and vertical dimensions of the sheet. Thus below each type in the uppermost horizontal line, are arranged in column, the several modifications to which it has given rise. Lastly, it should be noted that the heads may either face each other, or they may be turned in opposite directions. Special significance of a superstitious nature was, it is asserted, attached to each of these modes.

Such then is the interpretation of the Marken gable decorations, in which a process of evolution may be seen at work, and ever (in this case at least) acting in the direction of simplification.

II. If my explanation of the origin and nature of the gable decorations of Marken Island be accepted, and I see no reason to dispute the conclusion arrived at, it appears to me to follow that the Marken islanders are probably allied in race to their Teutonic neighbours who at so early a period in European history are known to have habitually employed the horse-head as a decoration or trophy¹. In other words

¹ Andree (*Braunschweiger Volkskunde*) specially mentions the distribution of the horse-head emblem through the migrations of the Saxon race.

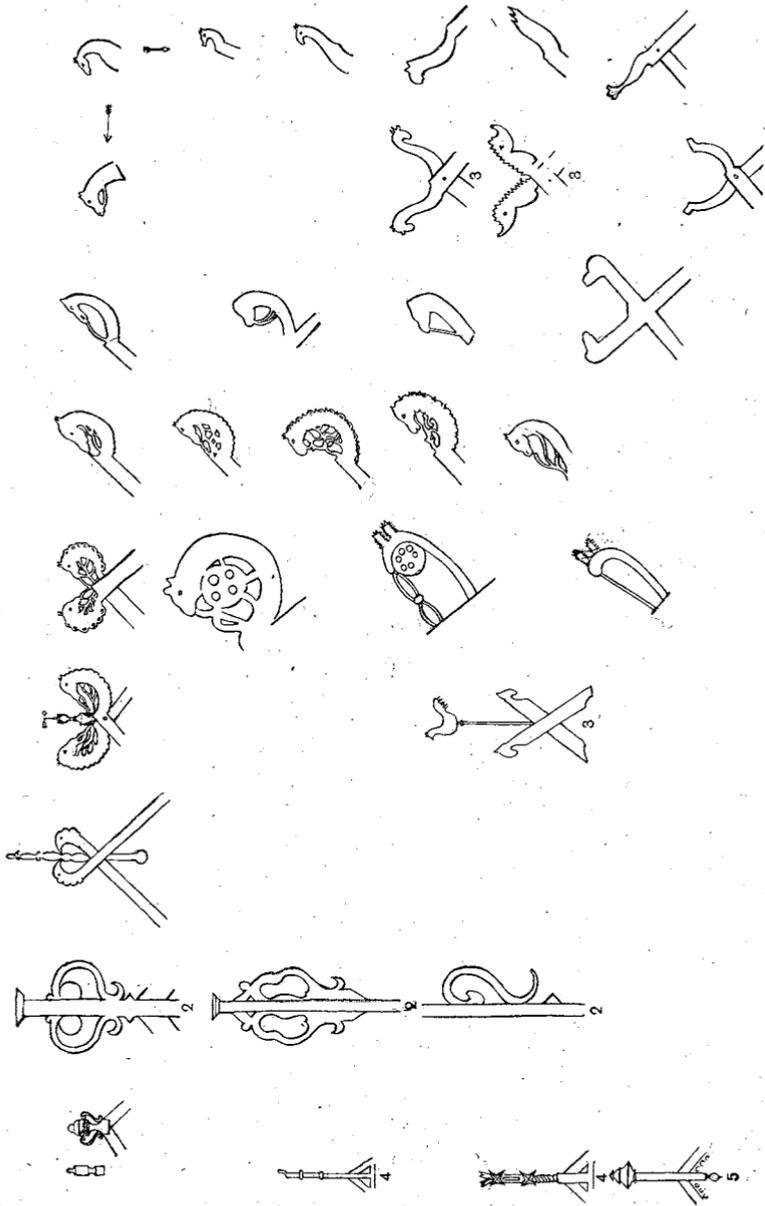


FIG. 5. Series of Marken gable decorations (indicated by the numeral 2), shewing derivation from conventional representation of a horse's head. The other forms occurred for the most part on German farmhouses.

the Marken islanders are not absolutely autochthonous, and my observation tends to indicate that if Marken and the adjacent islands were resorted to as a refuge by a tribe or clan fleeing before victorious Saxon immigrants, the latter were in that case attacking and displacing men of their own race.

There appears to me no reason for associating the Marken islanders with any of the Slavonic peoples, in spite of the fact that the horse is held in honour among these.

Lastly the occurrence in a fisher-population of representations of the horse's head seems also worthy of notice. The Marken islanders thus appear as a section of the great Saxon stock, which has adapted itself to this particular mode of life.

III. My personal contributions to the subject of the distribution of the horse's head or other emblems as gable decorations are but scanty. In default of further information I venture to add the following remarks, based upon observations made in the course of several railway journeys and a motor tour on the Continent. Some of the observed forms are represented herewith (fig. 6, p. 246). The distribution of gable decorations is not continuous, for while frequent throughout Holland, they are rare in Germany between Düsseldorf and Cassel; only new buildings, such as the new station at Lippstadt, present this feature, which I but rarely saw between Cassel and Jena in Saxe-Weimar. Along the Rhine, they become rare when Germany is entered, and this applies specially to the country south of Cologne, as also to that between Stuttgart and Lindau in Bavaria. The decorations occur in Hungary, but I have not identified the horse's head with certainty in that country. The houses of Southern Europe (including Turkey and Greece) do not lend themselves to this form of decoration.

In northern France decorations are also rare, save in La Manche near Cherbourg, where it is noteworthy that the predominant figure is that of a dove with half-extended wings, reminding one of the ancient Mycenaean figures of that bird. As regards the character of the decorations in other regions, those of Holland seem to be related to the Marken types, and

are therefore probably referable to a similar origin. An emblematical wheat-sheaf occurs in one case (fig. 6, no. 10), and thus accords with the records provided by Baring-Gould (*Strange Survivals*). In Franconia, at Oggerheim, a sort of urn-shaped decoration was seen.

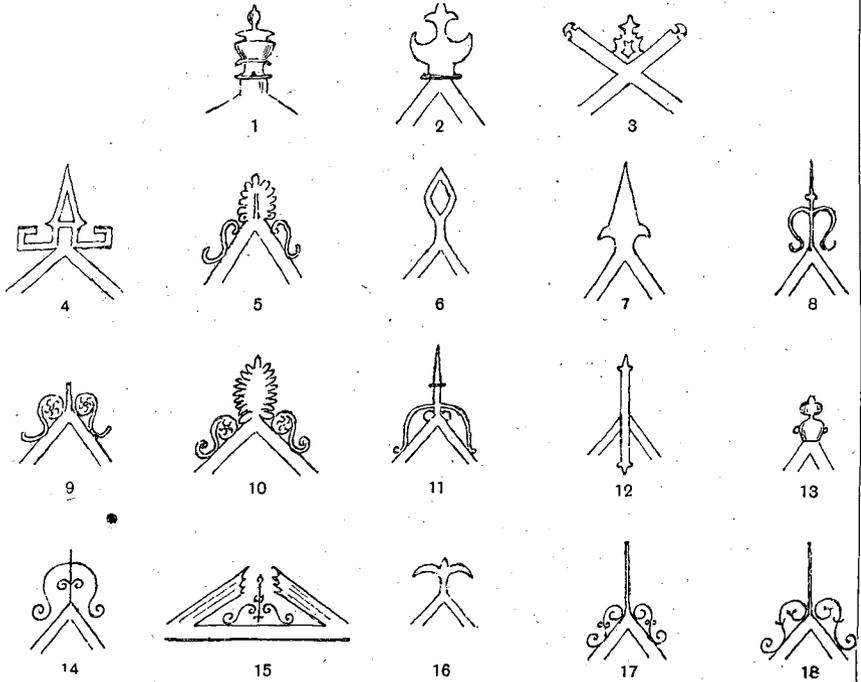


FIG. 6. Gable decorations noticed by the writer in Holland and elsewhere.

- (1) Lippstadt (modern). (2) and (3) New houses at Oggerheim in Franconia. (4—8 incl. Amsterdam. (9, 10) Voorthuizen. (11, 12, 13) Hilversum. (14, 15) The Hague (16) Ipswich. (17, 18) Utrecht.

In Russia the horse's head is frequently seen on gable-ends. A good example was shewn in Paris where at the Exhibition in 1900, a Russian cottage was erected. This cottage was decorated with rather conventional renderings of the horse's head both at the gable ends and also on the folding doors at the side of the building. Mrs McKenny Hughes possesses other records from Russia.

IV. Finally as to the occurrence of such decorations in our own country. Mr Thomas mentions the horse's head in Sussex. My own experience is again limited. In Cambridgeshire and Huntingdonshire I know of no example. In Cheshire the gable-ends of farmhouses are very commonly occupied by chimney stacks (as in Westphalia). The absence of Saxon emblems in Cheshire is the less surprising for in that district, Saxon influence was subordinate to that of the Scandinavian immigrants. In Aberdeenshire, and in Kent, I have been equally disappointed in my search for these survivals, but I believe that if a systematic enquiry in East Anglia could be undertaken, some such records would almost certainly be discovered, and I should be greatly obliged for any communications on this interesting subject.

LITERATURE.

1. Grimm. *Deutsche Mythologie* (esp. the horse's head in German mythology).
2. N. W. Thomas. *Folk-Lore Journal*, Vol. xi. p. 322.
3. Petersen. *Die Pferde-Köpfe an den Bauern-häusern*. Cf. Thomas, *op. cit.*
4. Baring-Gould. *Strange Survivals*.
5. Lawrence. *The magic of the horse-shoe*.
6. Lenz. *Die altsächsischen Bauern-häuser der Umgegend Lübecks*.
7. Andree. *Braunschweiger Volkskunde*.
8. Meitzen. *Das deutsche Haus*.

Mr A. BULL, of Cottenham, exhibited a bird's-eye sketch of Crowland Manor, Cottenham, made by Dr Stukeley in 1731; and pointed out the changes in the locality since it was drawn.

Monday, 20 February, 1905.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

The PRESIDENT gave a lecture on string-tricks and figures from many parts of the world.

The following paper was read by PROFESSOR T. MCKENNY HUGHES, M.A., F.R.S.,

ON BONE HARPOONS FROM KUNDA IN ESTHONIA:

On the south shore of the Gulf of Finland at Kunda in Esthonia there were, after glacial conditions had passed away, a number of small tarns and swampy estuaries, most of which have been filled by the accumulation of rainwash and alluvium and the growth of peat. Where these lakelets are not in the lines of drainage they have not got filled to the same extent, and remain open sheets of water, as may be seen in Finland, which is known as "the land of a thousand lakes."

Similar conditions once prevailed in the British Isles, though probably each post-glacial episode occurred earlier here than its representative stage in the Baltic Provinces.

When I visited Kunda in 1897 I had great opportunities of seeing the sections, thanks to the Baron Girard de Soucanton and to Dr Bührig, who not only offered us the most generous hospitality, but also showed us all the points of interest and had sections cleared for our inspection. To Dr Bührig I am also indebted for the specimens I now exhibit.

The district is naturally terraced from the higher ground to the sea, and the watercourses consist of small rapids and wider alluvial flats, which were once tarns or swamps, until we reach the ancient lagoons along the shore of the gulf.

There have evidently been many oscillations of level, the uplifts encouraging denudation and the depressions hastening the deposition of sediment.

In one of the hollows in the drift near Kunda the clay which lies at the base has yielded a series of plant remains, which, according to Professor Nathorst, have a distinctly arctic character. He has recognised *Salix polaris*, *S. herbacea*, and *Dryas octopetalā*. This flora followed hard on the receding ice, and dwarf willows and plants of northern type still linger in that district.

Above this is a bed of clay about 18 inches in thickness, in the lower part of which remains of mosses and of the water

milfoil have been detected. This is separated by a bed of sand not more than 3 inches thick, from the marl, of which there is about 3 feet, and on top of this there is a thin layer of peat from 1 to 2 feet thick. As the marl and clay have been largely excavated for the manufacture of cement there have been ample opportunities for studying the succession of beds and the objects entombed in them. At the bottom of the peat, relics of the bronze age are found. I exhibit a bronze and iron ring which was said to have been found here (Plate XIII, fig. 1). Dr Bührig pointed out that there is little or no carbonate of lime in the lowest beds, but that the quantity steadily increases, as we ascend, from 10% to 20% and 60% until it amounts to 85% in the marl. It is not clear whether this is altogether due to the decomposition of the shells of fresh-water molluscs, which are still well preserved here and there, or whether some may not be derived from the denudation of the Silurian limestones as they became exposed on the higher ground around. The bones of animals have been found in considerable quantities in the clayey deposits. Among these Constantin von Graevingk, Professor of Geology and Palaeontology in the University of Dorpat, has determined the Beaver, Reindeer, Wild Boar, and Wild Ox, and on some rising ground, which he thinks was once an island in the lake but is now a hill in the middle of the valley, he found the bones of Bear and Elk, and some birch charcoal which probably indicated the spot on which primaeval hunters had lighted their fire.

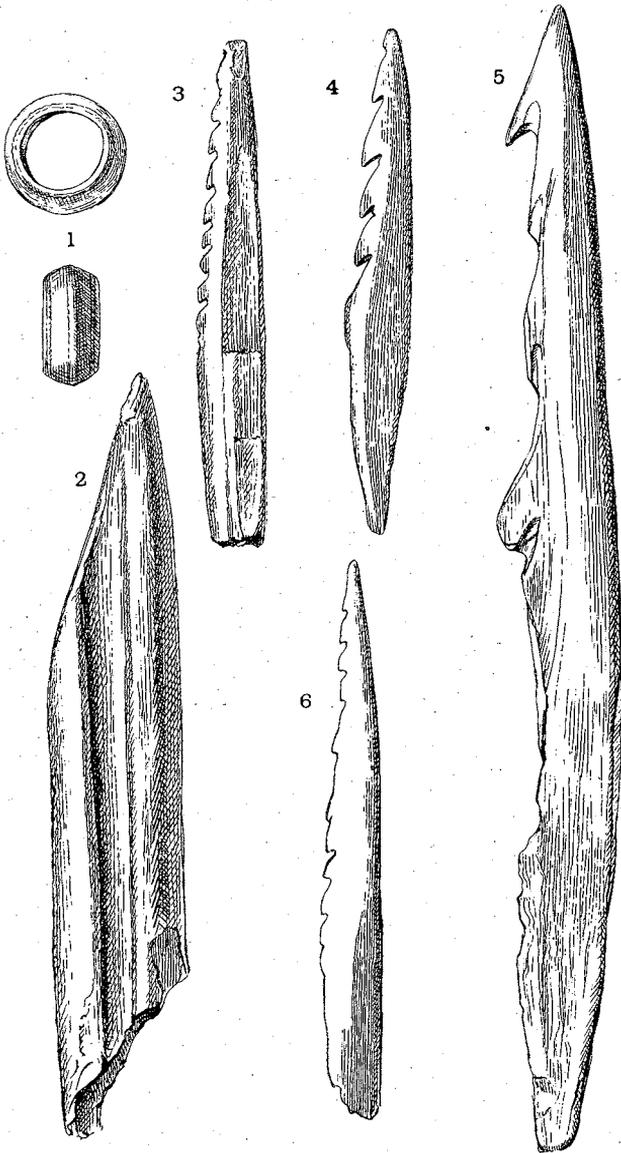
In the clayey deposits with the other remains of animals were various implements, among them bone harpoons and an instrument (Plate XIII, fig. 2) similar to one commonly found in our fens and known among the workmen as a "flayer," from the idea that it was used in stripping off the skins of animals. Compare *Archaeol. Journ.* Vol. LVIII, No. 230, pl. I, figs. 9, 10, and 10 a.

We may learn much as to the conditions of life among the primaeval inhabitants of Britain from an examination of the objects found in the peat of Esthonia. I propose to call attention now to one special group, namely, the fish spears, of which, thanks to my friend Dr Bührig, I am able to exhibit

some interesting examples. These implements are elsewhere associated with the remains of man of every age. For our present purpose it will be sufficient to group them under three heads, the unilateral, in which the spear is barbed on one side only; the bilateral, in which there are barbs on both edges; and the pronged, in which several unilateral spears are fastened together somewhat after the fashion of an eel spear, only that instead of consisting of one flat piece divided up at the end like a fork the prongs are not in one plane.

The bilateral spears are not uncommon in caves of Palaeolithic age, as in Kent's Cavern and the caves of Dordogne. They are found also in deposits of the Neolithic and Bronze ages, as in the Lake Dwellings of Switzerland. The unilateral form, to which all those I have received from Kunda belong, occur in the Palaeolithic caves, the Lake Dwellings, and among the Fuegians of to-day. Of course when we find a unilateral spear it is not always easy to say whether it was intended to be used alone or to be tied with others to form a pronged spear. It is highly probable that some of these Kunda spears were mounted in the same way as the three-pronged fish spear of the Esquimaux. These barbed weapons of Kunda (Plate XIII, figs. 3—6) were spears, not arrows. They are too irregular in form to have been shot any distance with precision, but they may have been used as harpoons and thrust or hurled short distances with or without a string attached. In the lacustrine deposits of Kunda a few feet below the peat the jaw of a large pike was dug up with the point of one of these harpoons sticking in the bone. This specimen is now in the Museum at Dorpat.

In the Mabinogion the great salmon that carried Kai and Gwrhyr to Gloucester had fifty fish spears sticking in his back which he asked the eagle to take out for him. From this we may infer that the people for whom that poem was written must have been familiar with the method of taking fish by striking them with a harpoon, the head of which the fish found it difficult to rub off—of course because it was barbed. In parts of Russia it is still common to take large fish with a spear instead of with a net or line, and the pike is from its habit of



Bone Harpoons from Kunda.

basking particularly exposed to this mode of capture. Bones of the pike occur in and around the Fenland and associated with ancient remains of man, but we have not as yet any direct evidence as to how they were taken.

The Reverend CHARLES HENRY DYER, of St John's College, exhibited an altar-cloth from Knapwell, Cambridgeshire; and the Reverend VYNER NOEL GILBERT, M.A., of King's College, a gold snuff-box presented to a member of his family by H.R.H. Prince Frederick of Hesse.

Monday, 6 March, 1905.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

Baron A. VON HÜGEL, M.A., exhibited and made remarks on recent additions to the collection.

The following paper was read:

ON A SURVEY OF THE KING'S DITCH AT CAMBRIDGE,
MADE IN 1629.

BY MR T. D. ATKINSON.

The drawing (Plate XIV) which I have the honour to exhibit this afternoon is a copy of one in the possession of Mr J. H. Gurney, of Keswick Hall, near Norwich (MS. Collection, Vol. 109). Mr Gurney's drawing is, I suppose, an old copy of the original.

As all Cambridge people know, the King's Ditch was the military defence of the town on the south and east, the river being the defence on the west. This ditch was made by King John in 1215¹, and developed in 1267 by Henry III², who intended to build a wall in addition, but this project was not carried out. The ditch began, I may remind you, at the Mill Pool just above Silver Street Bridge, and ran up what is now Mill Lane. On reaching Trumpington Street it was crossed by a bridge with a gate upon it called Trumpington

¹ Cooper, *Annals*, Vol. i. p. 35.

² *Ibid.*, pp. 49, 50.

Gate. From this point it ran down Pembroke Street, which it left at the south-west corner of the Chemical Laboratory, to take a diagonal course in a north-easterly direction across the site of the New Museums, down Tibbs Row, and between S. Andrew's Church and the Post-Office, to reach S. Andrew's Street at a point nearly opposite to Walls Lane, now called Hobson Street. Here there was another bridge, and a gate called Barnwell Gate, because immediately outside it was the open arable land known as Barnwell Field. From here the line is preserved by Hobson Street, but is stopped abruptly by the grounds of Sidney Sussex College. Formerly, however, the ditch continued across this land and passed under Jesus Lane just opposite the Friends' Meeting House at the corner of Park Street. It ran down Park Street and joined the river again opposite to the gable of the Pepysian Library at Magdalene College. This course is clearly shewn on the old maps. Along a considerable part of this route there now runs a comparatively modern brick culvert. The stone bridge under Jesus Lane still exists and has been described in our *Proceedings* (Vol. IX.). Some part of the ditch—that in Park Street—was open within the memory of persons who died not more than ten years ago. There is, therefore, no doubt about its, exact course, which, moreover, is always verified, when any excavations for building or drainage works are made on the line, by the discovery of a bed of unmistakable black mud which appears to have been its most notable feature.

This ditch can have been of little or no value as a military defence. It may have given some protection against casual marauders, and I suppose it was of use at a time when a toll was levied on goods brought into the town. But the ditch made such a convenient, only too convenient, a substitute for a sewer, it was such a good place for shooting all sorts of rubbish, that it became a serious nuisance, and was doubtless the cause, or a principal cause, of the frequent outbreaks of sickness at Cambridge.

This was the opinion of the famous Dr Perne, Master of Peterhouse, and Vice-Chancellor (1574-75). Writing in that

year to Lord Burghley, Chancellor of the University, on the subject of the plague by which the town was at that time visited, he says that "our synnes is the principall cause" but "the secundarie cause and meanes that God did vse to bringe the same is...partlie by the apparell of one that came from London to Midsummer Fair, and died of the plague in Barnwell...The other cause, as I conjecture, is the corruption of the King's dytch¹." He therefore proposes that the ditch should be flushed out by turning into it a stream of pure water. This water was to be obtained by tapping the stream now called Vicar's Brook, rising at Nine Wells in Shelford. The point in Vicar's Brook at which the water was to be diverted was where the stream crosses the Trumpington Road, at the first milestone and just opposite Brookland's Avenue. This point was then called Trumpington Ford.

This good suggestion was carried out in 1610. A certain proportion of the water was diverted for cleansing the ditches of Emmanuel and Christ's Colleges, and for supplying a conduit in the market-place, but the main object was to cleanse the King's Ditch. We still see the water running down Trumpington Street and S. Andrew's Street, and disappearing down gratings at the corner of Pembroke College, and near the Post-Office. At these points the water falls, I believe, into the culvert which I have mentioned as taking the place of the old ditch, and so is conveyed to the river².

I now come to the Survey which is the subject of this paper. It appears from this Survey that the scheme for cleansing the ditch had not answered expectations. The bed of the ditch was so irregular, and the depth varied so much, that the water did not flow quickly; there were pits in which mud and refuse accumulated. In order to make the water supply efficient it was necessary that the bed of the ditch should be regulated to what we should now call "an even gradient." This is what the Surveyor proposes to do.

¹ The letter is printed in full by Cooper, *Annals*, Vol. II. pp. 322, 323.

² A good deal of material relating to the history of this water supply was collected by the late Mr George Matthew and bequeathed by him to the Free Library.

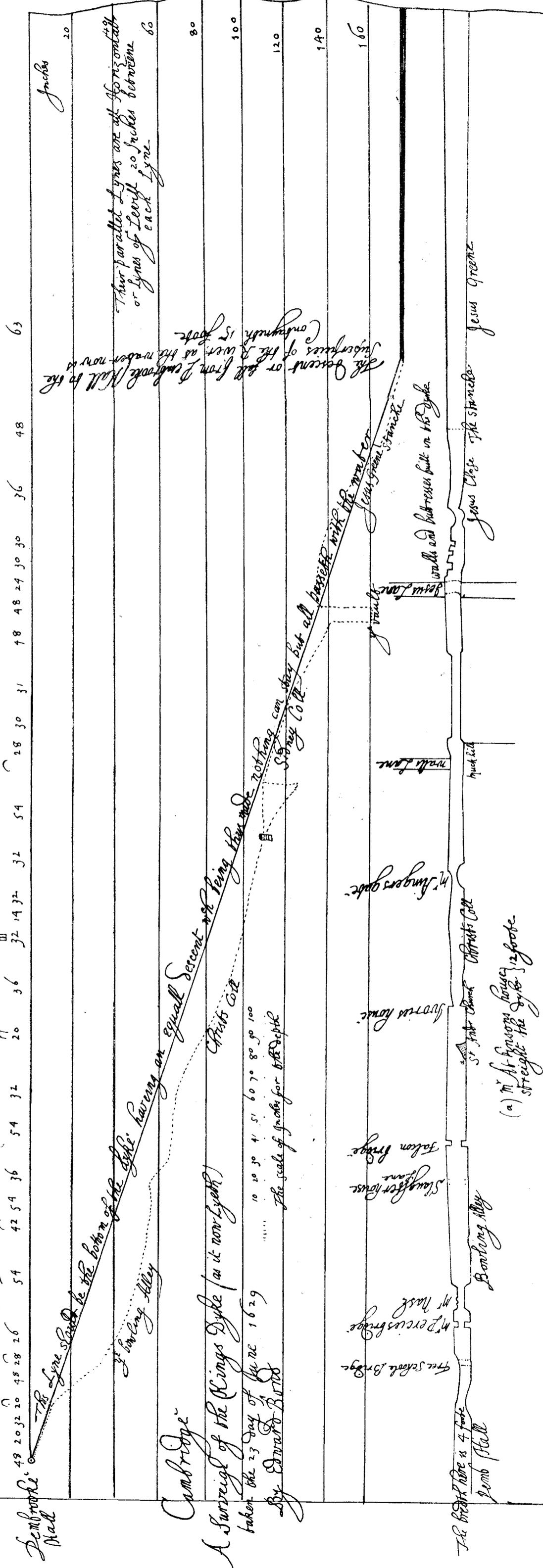
The diagram is a good piece of work ; it is very clear, and explains itself without the help of any written description. It is, however, drawn in a somewhat technical manner, and I will therefore give a few words of explanation.

The drawing is about $20\frac{1}{2}$ inches by 8 inches. The title, on the left-hand side, is *Cambridge | a Surveigh of the King's Dyke (as it now lyeth) | taken the 23rd day of June 1629, | By Edward Bond*. At the bottom of the sheet is a plan of the ditch, indicating the principal features along its course, and the various obstructions and encroachments¹; the width of the ditch at different points is figured at the top of the sheet. The course of the ditch really formed a half moon, but here it is for convenience drawn as if straight. The upper part of the diagram is a section shewing the depth of the ditch at every point. In order to make the rise and fall of the bed of the ditch more clear, the altitudes are drawn seventy-five times the size of the horizontal distances, just as sections of land are often drawn in modern surveys. The actual length of the ditch from Trumpington Street to the river is about fourteen hundred yards, and the fall of the ditch according to the Survey is fifteen feet. The bed is shewn by the dotted line. As in the plan, various objects are noted along the course of the ditch. The proposed rectified bed of the ditch is shewn by a straight line, and the object of the whole survey is made clear by the explanatory note written along the line: *This Lyne should be the bottom of the dyke having an equall descent wch being thus made nothing can stay but all passeth with the water.*

A lecture was given by ERNEST BALFOUR HADDON, B.A., Christ's College, ON THE DOG MOTIVE IN BORNEAN ART, illustrated by lantern-slides and specimens.

¹ For instance: "Mr Atkinson's house streight [for straits, i.e. narrows] the dyke 12 foote" (apparently a mistake for 2 feet).

The breadth of the Kings Dyke in Inches



The great River of Grant.

Monday, 8 May, 1905.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

The following papers were read:

ON TWO FOURTEENTH CENTURY ESQUIRE BEDELLS¹.

BY THE REVEREND HENRY PAINE STOKES, LL.D.,
Corpus Christi College.

ON SOME CONSECRATION CROSSES IN EAST
ANGLIAN CHURCHES.

BY MR T. D. ATKINSON.

I believe that all we know positively about Consecration Crosses² may be told in very few words: That at the consecration of a church the bishop made with oil of chrism twelve crosses on the outside of the building—three on the north side, three on the south, three on the east, and three on the west—and twelve more crosses inside. The rubric of the Consecration Service requires that the crosses should be ten palms—equal to seven feet five inches—from the floor. But many extant examples are much lower than this; some are only three or four feet from the floor. Then again it is required that the crosses shall be in circles, but unless many of the crosses which I take to be those made at the consecration are not so, this injunction also was violated. The rubric required that a candle should be burned under the cross on certain occasions, and yet we seldom find any remains of the metal bracket for this candle or a hole in the stonework into which the bracket could be fixed.

Examples of consecration crosses inside the church are far more numerous than outside. They are almost invariably

¹ This paper will appear as an Octavo Publication.

² I wish to acknowledge my indebtedness to papers by Mr John Gage in *Archaeologia*, xxv, and by Dr Middleton, *Archaeologia*, XLVIII.

painted, the outline being faintly incised on the plaster. The nearest instances to us at the present moment are two in the old chapel, now the library, of Pembroke College. They are now hidden by book-cases. There is a mutilated example in Trinity Church, on the north wall of the north aisle (fig. 1); it

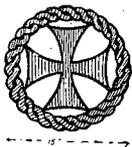


FIG. 1.

Cambridge, Holy Trinity Church.
North wall of north aisle, inside.



FIG. 2. Heydon, Norfolk.

North wall of north aisle, inside.

is about the orthodox height of ten palms from the floor, and is surrounded by a green twisted wreath, the cross itself being red with a black outline. Red is the most common colour for inside crosses. An example of unusual form, also enclosed in a green wreath, is that at Heydon in Norfolk (fig. 2). The two most common types are to be seen in two churches of extraordinary interest on the east border of our own county; the derelict church of Landwade contains two of the most common type of all on the north and south walls of the nave (fig. 3); while the

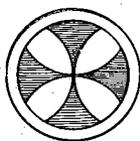


FIG. 3. Landwade.

North and south walls, inside.

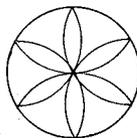


FIG. 4. Isleham (inside) and
Great Eversden, north-west
buttress of tower.

deserted and desecrated church at Isleham contains not less than seven, of a type also common (fig. 4). But this building has long been used as a barn, and I am disposed to think that three of these seven crosses are the forgeries of some young agriculturist. I shew a plan of the church on which their positions are marked (fig. 5). I need hardly observe that the positions of crosses are as important or more important than

the details of the crosses themselves. These latter must have been dictated generally by the fancy of the individual painter,

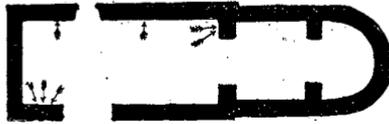


FIG. 5. Isleham Old Church.

Sketch-plan to shew positions of Crosses.

while the positions no doubt followed a rule or rules, and these cannot even be conjectured till a large number of examples have been recorded. It will be observed that at Isleham two on the east wall of the nave almost touch one another, and that three others are crowded together on the south wall. If we strike out one of the former and two of the latter we get a suggestion of an orderly arrangement. No colour remains; only the incised lines, emphasized in one case with a tar-brush. Perhaps further investigation would settle which, if any, were forgeries.

The nearest approach that I have seen to a complete set are those at Attleborough, in Norfolk, a church remarkable also for its grand rood-screen and loft re-erected at the west end. Here there are remains or indications of about half-a-dozen disposed symmetrically and at equal distances on the north and south walls of the aisles. There are several in Great Livermere Church in Suffolk, including one in the chancel, which position for some reason that I cannot explain is rare.

Sometimes consecration crosses are found on window jambs: at the charming little church of Coton there is a carving which at first sight might be taken for an example, but closer examination shews that it is not. In the north wall of the chancel there is a 'low-side-window,' and this has been blocked up by a slab of stone which formerly was part of the inner jamb of some window of the fifteenth century. This piece of jamb bears the carving which looks rather like a mutilated consecration cross. As a matter of fact it is I think a representation of a broken wheel with spikes in the tire and swords or daggers

between the tire and the axle. I imagine it to be a St Catherine's wheel. There was formerly a gild in the parish dedicated to St Catherine.

We often notice on one jamb—generally the east jamb—of the doorway a small cross somewhat rudely cut or scratched. Mr J. T. Micklethwaite thinks that this is “an addition to the ordinary dedication cross¹.”

The outside crosses have almost all gone. The hand of time has done much, and the hand of the architect has probably done more. But not the weather or even the process known as ‘restoration’ would have obliterated so many examples if they had been carved on the stonework. Presumably therefore they were generally painted. The best examples, and the best known, are those at Salisbury Cathedral. I give an example cut on the face of the north-west buttress of the tower of Kenninghall Church in Suffolk (fig. 6).

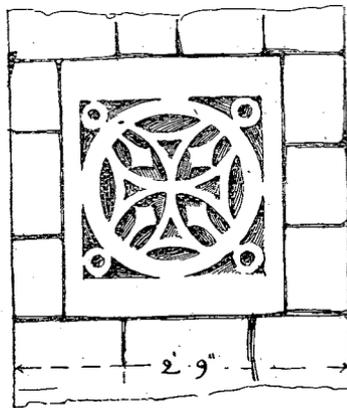


FIG. 6. Kenninghall.

North-west buttress of Tower.

A remarkable instance of external painted crosses is mentioned by Professor Middleton. At North Repps, in Norfolk, patches of plaster about a foot square were laid on the wall, and the crosses were painted on them. These all remained to the full number of twelve and were seen by him.

¹ *The Ornaments of the Rubric*, Alcuin Club Tract, No. 1.

But when the church was restored every one was destroyed, crosses, plaster and all. North Repps was probably unique. I suppose that there is now no church which preserves twelve crosses all outside or all inside. Salisbury Cathedral has sixteen in all, but eight are inside and eight are outside. I think that I may affirm that there is no external cross on any church or college chapel in Cambridge. But on one of the tower buttresses of Great St Mary's—the west face of the southernmost of the two west buttresses, to be precise—is a round sinking fourteen inches in diameter and about an inch deep. The ground of the sinking is slightly convex. This is a piece of modern 'restoration'; the sinking is, I am told, a copy of one which was on the old stone which formerly occupied this position, and my informant¹ adds that this is the mark from which the miles were measured along the roads leading out from Cambridge. This may well be, and the thing may be the remains of a consecration cross into the bargain. The sinking is just the size of a consecration cross but is rather near the ground, especially for a church standing in a public thoroughfare. The cross, if ever there was one, was, we may suppose, carved in relief or made of metal.

The chapel of King's Hall was consecrated in 1499; the following record is preserved in the accounts: "Expense circa novam Capellam. Expense circa consecrationem ejusdem viz. pro prandio xx.s. It' pictori qui fecit cruces circa ejusdem xvj. d.²"

I may perhaps be allowed to give a word of warning in regard to the circles with rays or spokes which we sometimes see scratched on buttresses of churches and which look so like consecration crosses. They must be carefully examined, for they sometimes turn out to be rude sundials made by a sexton or by workmen engaged upon building some part of the church. On the other hand there are cases in which a true consecration cross is so elaborate that it might not be recognized as one; the central cross at the east end is developed into a crucifix, some-

¹ Mr Gilbert Hattersley, who has succeeded to the post, which his uncle held for so long, of warden of the church.

² Willis and Clark, *Architectural History*, II. 451 note.

times with accompanying figures; Coggeshall in Essex is the nearest example.

I now come to two types of cross which I venture to suggest are consecration crosses.

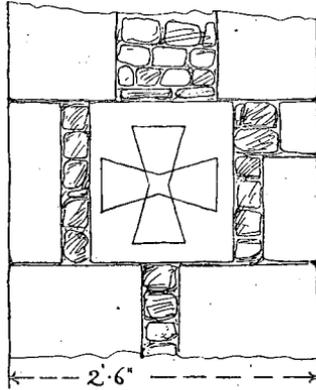


FIG. 7. Helion Bumpstead.
North-east buttress of Nave.

The first of these is illustrated by an example (fig. 7) from the little church of Helion Bumpstead, still unspoiled by 'restoration,' and long may it remain so. This cross—the immediate subject of the present paper—is marked by very faintly incised lines on the face of the north-east buttress of the nave, and is about the right height from the ground. The surface within the lines is just a shade darker than the surrounding stonework, suggesting that the cross was painted; the lines are certainly so faint that they cannot have been meant for more than a guide to a painter. This cross is the only example of the sort that I have seen: that is to say, it is not in any way architectural or decorative like the cross at Kenninghall (fig. 6), so that I think there cannot be any doubt that it is a consecration cross; at the same time it is not surrounded by a circle,—a fact which will have a bearing on the type to be described next. Middleton gives a similar but smaller example from Chichester Cathedral.

The second type of outside cross, which I am disposed to associate with the act of consecration, consists of a cross-shaped

panel of split flint let into the stonework. There are a good many examples of this about Cambridge. The largest number that I have seen on one church are the four at Fen Ditton. They are on the buttresses of the chancel, and are conspicuous from the road, being some ten feet above the ground.

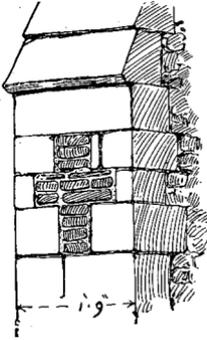


FIG. 8. Great Shelford.
South buttress of Chancel.

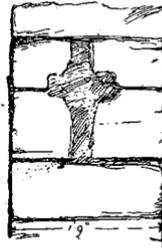


FIG. 9. Great Shelford.
South-east buttress of Chancel.

There are remains of three at Great Shelford. In one of these brick was used in place of flint (fig. 8). This is an important example for my present purpose, for it might be argued that the neatly worked crosses at Fen Ditton are merely decorative, while this Shelford cross is certainly not. It will be noticed that the top right-hand quoin is rather short, and that a narrow slip of stone has been placed at the end of it to make the cross symmetrical. Probably the brickwork was originally plastered and painted. Another example from Great Shelford (fig. 9) has clearly been cut after the buttress was built; the sinking is now filled with cement.

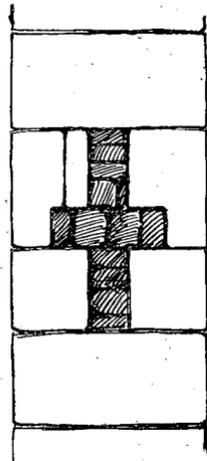


FIG. 10. Linton.
Outside.

There is a good example of a flint cross at Linton (fig. 10). Here one of the quoins has been, as it were, lengthened, like the one at Shelford (fig. 8), but here again the cross, instead of

being formed by the alternation of long with short quoins, has been deliberately cut into the stones.

There is perhaps a difficulty in connecting some of these crosses with the consecration: namely, the great height at which some of them were made, when they might have been just as conveniently made near the ground. Thus those on the tower buttresses at Steeple Bumpstead are some fifteen or twenty feet from the ground. There are at least two contemporary representations¹ of the consecration of a church in which the crosses are at a considerable height from the floor. In one instance the bishop stands on a moveable stage and in the other he has mounted a ladder in order to reach the cross. But still I think the people of Steeple Bumpstead cannot have expected the bishop to anoint their crosses.

ON HOBSON'S CONNECTION WITH THE SO-CALLED HOBSON'S WATERCOURSE.

BY JOHN EBENEZER FOSTER, M.A., Trinity College.

So much misapprehension exists as to the connection of the celebrated Thomas Hobson, the Cambridge carrier, with the watercourse wrongly named after him, that I have shortly recorded the real facts of the case.

The watercourse itself is an ancient one, for in a letter which Dr Perne, then Vice-Chancellor, wrote to Lord Burleigh on the 21st Nov. 1574, about the prevalence of the plague in Cambridge he refers to it as then coming from Shelford to Trumpingtonford, and thence to the Mills in Cambridge, and shewed how it might be used to scour the King's Ditch to the benefit of the University and Town, as the corruption of that watercourse was one of the causes of the plague².

Nothing appears to have been done at this time, but in 1606 subscriptions for carrying out the scheme were collected³; and, on the 26th October, 1610, Thomas Chaplyn, Lord of the

¹ Both mentioned by Middleton.

² Cooper's *Annals*, Vol. II. p. 322.

³ Masters, *Hist. of Corp. Chr. Coll.* p. 133.

Manor of Trumpington Delapole, conveyed to the University and Corporation such part of the soil of the watercourse as was situate in Trumpington and six feet of the soil on each side of it for purposes of cleansing and repairing. This deed states that the University and the Borough had then lately made a channel whereby the stream had been carried into the King's Ditch¹.

In 1614 a conduit was erected and water conveyed thereto from the new river, as it was then called, at the joint expense of the University and Town. The statement in the inscription on the conduit that it was erected at the sole expense of Thomas Hobson is certainly incorrect.

Thomas Hobson died 1st January, 1630-31². By his will he gave seven leys of pasture in Swinescroft to trustees upon trust to apply the yearly profits to the maintenance of the said conduit, and he desired that the top might within two years after his decease be made half a yard higher or more, for which purpose he bequeathed an additional £10. This appears to have been the only benefaction given by Hobson for the benefit of the trust and as will be noticed it is not applicable to the upkeep of the watercourse.

It was supplemented in 1632 by Edward Potto, who devised two houses in Butchers' Row upon similar trusts.

Swinescroft became the site of Downing College and the purchase money received on the foundation of that college amounting to £333. 5s. 8d. was, with another sum belonging to the trust, invested in the purchase of property at Over.

In 1805 Joseph Merrill bequeathed a sum of £400 towards the maintenance of the conduit and pipes, and a further sum of £300 towards fencing and keeping in repair the banks of the watercourse supplying the conduit from the point where Trumpington parish ended.

The above statement shews that Hobson's name has become attached to the stream with no justification, as his benefaction was given entirely to the support of the conduit. But it is difficult to upset an ancient tradition.

¹ Cooper, *ut supra*, Vol. III. p. 37.

² *Ibid.* p. 230.

Monday, 15 May, 1905.

A Special Meeting was held, at which Mr FRANKLIN WHITE gave a lecture, illustrated by lantern-slides, on THE ANCIENT RUINS IN RHODESIA, CENTRAL AFRICA.

SIXTY-FIFTH ANNUAL GENERAL MEETING.

Monday, 22 May, 1905.

A. C. HADDON, Sc.D., F.R.S., President, in the Chair.

The Officers of the Society were elected for the ensuing year.

President: The Reverend WILLIAM GEORGE SEARLE, M.A., Queens' College.

Vice-Presidents: WILLIAM MILNER FAWCETT, M.A., Jesus College; MONTAGUE RHODES JAMES, Litt.D., King's College.

Ordinary Members of the Council: ALFRED CORT HADDON, Sc.D., Christ's College; WILLIAM RIDGEWAY, M.A., Disney Professor; the Reverend HENRY PAINÉ STOKES, LL.D., Corpus Christi College.

Treasurer: Mr ROBERT BOWES, 13, Park Terrace.

Secretary: JOHN EBENEZER FOSTER, M.A., Trinity College.

The following Honorary Members were elected:

WILLIAM MATTHEW FLINDERS PETRIE, Professor of Egyptology, University College, London.

His Excellency HAMDİ BEY, of the Imperial Museum of Antiquities, Constantinople.

The following papers were read :

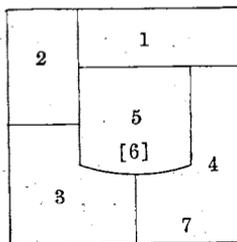
A NOTE ON SOME HEIDELBERG AUTOGRAPHS.

BY F. C. BURKITT, M.A.

I have before me a copy of the 1562 reissue of the *Editio Princeps* of the New Testament in Syriac, commonly called the *Peshitta* (belonging to Mr F. J. Sebley). The first issue had been printed at Vienna in 1555: this reissue differs from that of 1555 in the colours of the title-page, and also in the design on the back of the title-page, which is blank in the 1555 issue.

The book ends with signature LL. At the end of this volume is bound a First Syriac Reading-book, the work of Chancellor John Albert Widmanstätter, the editor of the *Editio Princeps* of the *Peshitta* N.T., dated 1555, Nov. 21, and (at the end) 1556, February. This Reading-book contains some curious pieces, including the Lord's Prayer with "Forgive us our debts and our sins," i.e. a text made up from Matthew and Luke.

The binding is a beautiful stamped pig-skin, of contemporary date, with the clasps intact; in fact, the whole volume is in excellent condition. It must always have been a handsome book, and well taken care of. But what gives the book an exceptional interest is a series of slips pasted in the cover, facing the title-page. Their arrangement may best be understood by a diagram.



(1) and (2) are in the handwriting of *Immanuel Tremellius*, the distinguished Hebrew scholar (1510—1580), 'King's Reader of Hebrew' at the University of Cambridge from 1549, and Professor of Old Testament Studies at Heidelberg from 1561 to 1577.

(3) is in the handwriting of Gaspar or *Caspar Olevianus* of Treves, leader of the Calvinists in Heidelberg and Professor of Dogmatics from 1560 to 1577¹. This slip gives us also the name of the original owner, Michael Hortinus.

(4) is written by *Petrus Colonius*, i.e. Peter van Keulen of Ghent, sometimes called Pierre de Cologne, a Calvinist refugee from Metz, who held a preacher's office in Heidelberg before 1561 and after 1569.

(5) is written by *Peter Martyr Vermigli* of Lucca, who died Professor at Zurich, Nov. 4, 1562, after a chequered career, a leader of the Reformers in Italy, and during the reign of Edward VI Canon of Christ Church, Oxford, and Regius Professor of Divinity. He was a friend of Cranmer and had some share in the Prayer-Book of 1552.

(6) is covered by (5), but the latter can be partly lifted up. The signature is gone, but it began with P.

(7) is in the hand of Jean Guibaud, who bought the book from the son of Michael Hortin for two ducats. Guibaud also wrote his name, more legibly, on the last page of the volume.

The slips contain texts, etc., such as might accompany a presentation book from Professors of Divinity to one of their pupils on his departure to parish or evangelical work. The note from Peter Martyr was inserted last, while that from Olevianus must definitely locate Hortinus at Heidelberg, for it speaks of him as an 'excellent youth.' With this comes the circumstance that the book itself is a Syriac work and that it contains the signature of Tremellius, who about this time re-edited the Syriac Bible. We may therefore conclude with reasonable certainty that Michael Hortin was a student at Heidelberg about 1562 under Olevianus and Tremellius, and that Peter Martyr Vermigli, then nearing his end at Zurich, sent him a friendly message, which he pasted in the place of honour in his Syriac Testament, along with similar testimonials from those under whom he studied at Heidelberg.

¹ In 1577 came the Lutheran reaction under Ludwig VI, when the Calvinists lost their Professorial Chairs.

The inscription from Petrus Colonius is written in the book itself, apparently after the other pieces were pasted in.

The text of the various pieces is as follows:—

- (1) ^(sic) בְּנֵי אָם יִפְתָּוּךָ חַטָּאִים אֵל תִּאֲבָה : ^(sic)
 Siue viuimus, siue morimur
 dominj sumus.

Iñmanuel Tremellius

[“ My son, if sinners entice thee, consent thou not” (Prov i 10)
 “ whether we live or die, we are the Lord’s”]

- (2) א ב ג ד ה ו ז ח ט י כָּד
 ל מֵם נָן ס ע פֶּה צָץ
 ק ר ש ת : וּאֲנִי בַחֲסוּד
 בַּטַּחְתִּי יִגַּל לְבִי בִישׁוּעַתְךָ
 אֲשִׁירָה לְאֱלֹהֵי כִי גַמַּל עָלַי :

[The Hebrew Alphabet, followed by: “ And I in thy mercy have trusted, let my heart rejoice in thy salvation. I will sing to my God (*sic*), for he hath dealt bountifully with me” (Ps xiii 5 6)]

- (3) 2 . ad Timoth . 3
 Omnes qui pie volunt viuere
 in Christo Jesu perfeccionem
 patientur.

Gaspar Oleuianus Treuir
 apostoli hanc fententiã
 que plurimũ me cõsola-
 ta est, et cõfirmait,
 optimo adolescenti Micha-
 eli Hortino perpetue &
 cõfolationis & cõfirmationis
 ergo, scripsi.

[I, Caspar Olevianus of Treves, have written this sentence of the Apostle (2 Tim iii 12), which has greatly consoled and confirmed me, for the excellent youth Michael Hortinus to serve as a perpetual cõsolation and confirmation.]

- (4) En Dieu
 ta fin.
 μέγας πορισμός ἐστὶ ἡ
 εὐσέβεια μετὰ ἀνταρκείας
 Petrus Colonius

[On this man, see above. The text is nearly 1 Tim vi 6. The fact that this is a French greeting makes me think it may have been written at Metz rather than Heidelberg.]

- (5) Paulus epla posteriori ad Timotheū
cap. 3. Omnis doctrina diuinitus ifpi
rata utilis ad docendū ad cōfutādū, ad
corrīgēdū et iftituēdū, i iuftitia ut p-
fectus fit homo dei et ad ōne opus bo-
num iftructus ~. cū ita⁹ diuinę litterę
tātū fecū habeāt utilitatis cōiūctū, noctur
na manu uerfandi funt et diurna ~

Pet^s Martyr Theolo
gię pfeffor.

- (7) Vendidit Johaṅes M.F. } i.e. John, son of Michael [Hortin]
. 2. ducat. Joh Guibaud⁹ } sold [this book] for 2 Ducats
Joh[annes] Guibaudus

- (6) Underneath Peter Martyr's letter can be read

[ε]μοι τὸ ζῆν, χριστό[σ και]	[[]
[τὸ ἀ]ποθανείν, κερδοσ	[[]
[Qu]ifquis huius feculi more [[]	[[]
[[] Christi miserabilem [[]	[[]
[[]nem, et hanc rerum f[[]	[[]
[me]nte confiderat, fer[[]	[[]
[[]afidueq, meditatuf[[]	[[]
[[]]. iftud cum Apoftol[o [[]	[[]
[an]imum inducet fu[um [[]	[[]

Heydelbergæ

P

This piece originally extended to the right-hand margin, but it has been largely torn away and covered up with Peter Martyr's letter.

A VILLAGE TRAGEDY OF FIFTY YEARS AGO.

BY G. WHERRY, M.A., OF DOWNING COLLEGE.

In the Museum at Cambridge is the shattered breast-bone of Abraham Green, who was shot and killed by Mr Nehemiah Perry while entering his house as a burglar at night. Truth

is said to spoil stories, but there is so much that is curious in this tragedy that a plain unvarnished account of it will be found sufficiently remarkable, and well worthy of record as evidence of village life under exciting circumstances about fifty years ago. The event occurred at Stretthall, or, as the country people call it, Strettle, in Essex, four miles from Saffron Walden, a remote village, where, on a rising ground, stands a quaint little old church, shewing remains of its antiquity in the long-and-short stonework of the angles, and the ancient Saxon chancel-arch. In the churchyard are tombstones of the Perrys of the past. Hard by is the Hall, a low brick building, more picturesque than spacious, which you enter from the east side, and thence, through doorways requiring a stoop to pass, you come by way of a dining-room to the foot of a flight of stairs of only nine steps. There is a landing on the top, with a small window looking south, and on either hand a bedroom. Standing on this landing Nehemiah Perry faced his assailants and shot one of them dead upon the stairs.

Perry was a remarkable man in many ways; he kept a certain amount of state, his clothes were always made in Bond Street, a dark blue coat with large roll collar, and light breeches and gaiters.

Dining at a good old oak table, which still remains in the room, he sat at the head of the board, and cut the joint for himself, passing it round with the remark, "Cut where you like"; for his drink he kept a stone bottle of brandy between his knees and could carry more of this liquor than most men.

Nehemiah in his youth had married a good-looking gypsy girl; but later in life they were separated, and he used to keep her at Catmere, one of his farms, about half a mile from the house. His wife's allies gave a great deal of trouble, so much so that the farmer had to order them off his land for continual trespass, and he vowed vengeance on those who visited his wife. Meantime, in revéngé, a valuable horse was killed by poison on the farm. Also there were many lawless deeds done in the neighbourhood, and Mr Gibson's bank at Saffron Walden was broken into. In the midst of these alarms, and especially of the feud with the gypsies, Perry lived in his house rather

expecting an attack. It came one night in March 1849, the snow being on the ground, as a determined and murderous attempt. Abraham Green (alias Little Abel), a noted poacher, with Gooddy, and Palmer, and others of his gang entered the house by the window of a room called the "old parlour," then a pantry. The burglars wore masks made of sacks with holes for the eyes, and their feet were done up in mufflers made of old waistcoats. It was strange that the house-dogs gave no sign. In breaking into the house the burglars disturbed a plate-rack, which roused Perry to face the dangerous crew. With such a desperate gang murder as well as robbery was probable, and it was known that there was a considerable sum of money in the house.

Mr Perry with a loaded gun stood at the top of his stairs, calling to his brother Thomas, who was in the room on the other side, to help. Thomas was rather a feeble-minded man, but he also had a loaded gun. The burglars came up the steps, but only two could approach at a time, and, as they advanced, Perry fired. The charge of slugs wounded the hand of one man who was carrying a pistol and the lantern, and killed the other on the stairs, with a shot through the heart. The men, drawing off their dead a little distance to the next room, made off as they came, through the pantry window. They hesitated for some time, and then came on again with the intention of burning the place down, but Mr Perry was on the alert, and was left in full possession, as master of the house.

In the morning Perry refused to get up to see callers until he had had his sleep out; he then sat at breakfast and interviewed his friends. "No, I'm not hurt myself," said he, "but there's a fellow in the next room has had all he wants," and there was to be seen the stiffened corpse left by his comrades set up in a corner, as if for inspection. Many neighbours now dropped in and were entertained at the house. One of his relatives drew three dozen corks from bottles of wine, all of which was drunk, besides ale and other liquor, on this memorable occasion.

The inquest was held at Strethall, where the body was left in position, and examined by the jury. False keys were found

in the pockets, a stick loaded with lead lay alongside. The top of a large wine glass would have covered the whole of the injury externally visible. Mr Perry was in capital spirits, and said that "if he had known which way the rascals escaped he could have picked off a couple more, as they could only get through the window one at a time." Some of the evidence was extraordinary. Mr *Thomas Perry* was sworn. He said, "I went to bed at 10, in my room opposite my brother's, and was wakened about 1 in the morning by my brother, who said, 'bring your gun, there is some one in the house.' When I got to the stair-head my brother was there and immediately shot the man. Some one cried 'give me my pistol.' I thought there were five or six persons below. I kept guard while my brother re-loaded."

Mr *Nehemiah Perry*—who was not sworn—said: "About one o'clock in the morning I heard a sort of smash which led me to fancy that a door had been broken open. It turned out afterwards that it was the fall of a plate-rack. I jumped out of bed, and before I could get well hold of my gun, I heard the passage-door smashed open. I hurried to the top of the stairs and called out, 'Hallo, Master Thomas, there is something up, jump out.' I heard footsteps of nine or ten people; someone halloed, 'Go it, you devil, we are all right now; go on.' I think they halloed out that to frighten me. I saw a man with a light in one hand and a pistol in the other. He had a covering on his face and his hat on; he looked very horrible. I said to Master Thomas, 'He has his shirt outside his clothes.' He was coming up the stairs, and was just on the turn when I took direct aim and shot him. He fell like a log. Master Thomas then came to the door, and I said, 'Don't be frightened, it's no use being cowed over it, one is all right. I have snuffed his candle out for him' (*laughter*). When the man was shot there was a cry for a pistol, and a scuffling. I heard no more. I am of opinion that they wanted my property and my life; my life more than my property. When I had shot I cried out, 'Ha! ha! ha! there's bits of men; come on.' They giggled and went, he! he! he!, then (quickly and loudly) ha! ha!" (*shouts of laughter*).

The foreman, on behalf of the jury, after a verdict of "justifiable homicide," made his speech. "They would not be justified if they let slip that opportunity of returning thanks to a kind Providence for saving the lives of the Messrs Perry, and they considered it their bounden duty to express their feelings of admiration at the conduct of those gentlemen, and especially that of Mr Nehemiah, upon this trying occasion. The Messrs Perry were not only entitled to the thanks of the jury, but to those of the whole neighbourhood, and the county generally for their intrepidity and coolness, and they rejoiced to see them still in the land of the living, where it was evident they were not intended to be. He and his brother jurymen trusted those gentlemen might long live to enjoy their station and their property." The Coroner added his congratulations to those of the jury. It was afterwards proposed to present Mr Nehemiah with a piece of plate, and to erect a memorial stone in the churchyard over the burglar with a record, as a warning to evil-doers.

As to Abraham Green, there was no difficulty in determining the cause of death—it was much as in the ballad, "the jury on the body sat, and gave their verdict in these terms, 'they found as how that certain slugs had sent him to the worms.'" The body was conveyed to the church, and placed in the belfry, where the sexton exhibited it for threepence a head, and hundreds came to see it from all parts of the country. Foremost and clamorous in the crush, before the inquest was over, was Hannah Burton, a woman from Elmdon, whose great object was to touch a wen on her neck with the dead man's hand.

Casts carefully made by Ward of Saffron Walden were taken of the face. One of the masks is at Walden, another in Cambridge, and Mr Perry himself had a third.

Only two of the accomplices of this burglary were brought to justice, namely Gooddy and Palmer. Superintendent Barns sent for Gooddy, whom he had apprehended, to Strethall, and placed the body of Green in a corner with his hat on, making him so lifelike that Barns himself would have "thought him still alive if he had not known to the contrary." Gooddy was then confronted with the dressed-up corpse and asked, "Do

you know this man?" Labouring under great emotion, which he tried in vain to suppress, he articulated with difficulty, "No, I never saw him before in my life." Gooddy and Palmer were tried before Chief Baron Pollock, who gave them a light sentence, remarking that he thought "there had been some hard-headedness in the way the body was used for purposes of identification¹."

Nehemiah Perry evidently felt that the body in the church was still to be disposed of. He would have liked "to have nailed it up on his barn with the hawks and hand-saws." But "who knows the fate of his bones or how often he is to be buried?" Mr Perry had been in the habit of sending hamper's of game to Cambridge to his trusted medical adviser, Dr Paget (afterwards Sir George), accordingly the body was doubled up and placed in a large game-hamper, and this heavy consignment was opened by the horrified physician, who found inside the hamper this wonderful letter:

"DEAR DR PAGET,

I have shot a man!

N. PERRY."

From Dr Paget's house the body was sent to the Anatomical School, where the attendant, Mr Sims, took charge of the specimen. Sims was frequently visited by sightseers and associates who wished to see Abraham Green, but he used to put them off with the remark, "Well, he's not quite fit to look at now, but if you come in about a fortnight he shall be ready for you."

Mr Humphry (afterwards Sir George) was then working in the School of Anatomy. The attendant above mentioned was employed there during the day, but occupied his evenings by waiting at dinner-parties. On the day of the arrival of Perry's victim Mr Humphry happened to be dining at a house where Sims was waiting, who, stooping over his chief, said in his ear, "There be another body, Muster 'Umphery."

Mr Perry lived for twelve years "to enjoy his station and his property." He died in 1861, aged 74.

¹ *Life of Lord Brampton.*

It was his habit on market-days to visit the Old Sun at Walden, where he commonly drank two bottles of port, finishing up with an amazing amount of brandy. After these potations he drove himself home with a constable by his side, not because he was unsteady, but for fear of an attack. The famous gun—like Captain Crawley's pistol, "same which I shot Captain Marker"—was kept, ready loaded, standing up in the dog-cart between the driver and the constable.

Perry always kept a loaded gun ready in his house; not only so, he never went out of doors without his gun, not even across his garden. My informant—a doctor who has dined with Perry—tells me that if he had occasion to cross Perry's land near the house he sometimes quaked for fear of being shot at: and mentions the quantity of brandy drunk on one day at the Ancient Inn as eighteen shillings-worth, besides the two bottles of port which preceded the brandy. But village life has altered now with regard to drinking habits. The "three-bottle men" have departed, and the expression "as drunk as a lord" is no longer appropriate to the Peerage.

As far as possible in my narrative Perry has been made to tell his own tale, and some of his phrases are interesting to notice. Thus "that he would like to have nailed up the body to his barn-end with the hawks and hand-saws" reminds one of Hamlet's remark, "I am but mad north-north-west; when the wind is southerly I know a hawk from a hand-saw," hand-saw being used by Perry for hernshaw or heronshaw—a corruption of "heron-sewe," a common heron or perhaps a young heron. One would hardly expect to find a heron—which preys chiefly on fish—gibbeted with other birds commonly destroyed by gamekeepers, but there can be no doubt that such was the custom, and there is a fine woodcut by Bewick in the introduction to his book on Birds which represents a heron with hawks nailed up to a barn-end.

The extraordinary superstition about the dead hand which was to cure by touching the wen (wen = a fleshy tumour, A. S. Leechdoms; acc. pl. wennas) on Hannah Burton's neck is very curious as a piece of folk-lore. An account of this incident was published in the *Cambridge Chronicle* for 1849.

The hand of any victim of a violent death was of great value as a charm. "Finger of birth-strangled babe; Ditch delivered by a drab" says the witch in *Macbeth* in brewing a charm of powerful trouble. The "hand of glory" was of peculiar use to a burglar. It was cut from the corpse of a hanged criminal, anointed with certain unguents, and when lighted at the fingers with suitable incantations it kept the inmates of a house asleep. If a thumb or finger did not light, it meant that one of the household was awake, and not under the influence of the charm. This ghastly torch could only be extinguished by skimmed milk. Dalyell¹ mentions the case of John Neil, who was convicted, in March 1631, of consulting with Satan regarding the destruction of Sir George Home. Neil put a dead hand, enchanted by the devil, in Sir George's yard.

But these are instances of black or malevolent witchcraft. The use of the dead touch in white witchcraft is well known. Thomas Hardy's story of "the withered arm" is founded on fact. A young woman sent by a wizard had an interview with a hangman the night before an execution. The next day she approached the corpse, and having bared her "curst arm" the hangman laid the withered limb "across the dead man's neck upon a line the colour of a ripe blackberry which surrounded it." The woman shrieked; the "turn of the blood" predicted by the wizard had taken place. In this case there were other causes for emotion, and the charm was too powerful, for the patient died.

As a curative agent the touch of the dead was regarded with universal respect. Hunt² says he saw a young woman led on to the scaffold at the Old Bailey for the purpose of having a wen touched with the hand of a man who had just been executed; and at Northampton formerly numbers of sufferers used to congregate round the gallows in order to receive the "dead stroke." The fee demanded for the privilege went to the hangman.

The touch of a suicide's hand is reported to have made a cure in Cornwall. "To heal the king's or queen's evil," says

¹ *Superstitions of Scotland*, 1834.

² *Drolls and Romances*, second series.

Scot in the *Discoverie of Witchcraft*, "first touch the place with the hand of one that died an untimely death." In Storrington, not many years ago, a young woman afflicted with a goitre was taken by her friends to the side of an open coffin that the hand of the dead should touch it twice; and another West Sussex woman who had suffered for years from an enlarged throat, when she heard that a boy had been drowned in Waltham Lock, set off there immediately and had the part affected stroked with the dead hand nine times from east to west, and nine times from west to east¹.

The village life just commented on is now rapidly passing away before our eyes. Black witchcraft has gone, white witchcraft is slowly following. The language, manners, customs, and superstitions are undergoing alterations and repairs: so that even 50 years ago seems remote from our own time, and it is this rapid disappearance which makes a record of such slight scientific value appear worth the attention of the antiquary.

H. D. CATLING, M.A., of St John's College, made the following communication on

LOGGAN'S HABITUS ACADEMICI.

A short time ago I was so fortunate as to purchase a complete set of the plates which, together with a title unfortunately not included in my series, form the volume called *Habitus Academici*, and usually referred to as David Loggan's first work.

The main facts of Loggan's life are to be found in the *Dictionary of National Biography*, and in the Introduction to the reissue of his *Cantabrigia Illustrata*, published by Messrs Macmillan and Bowes in 1905. I need not therefore recapitulate them here, as both works are readily accessible. The two articles were written by Mr J. W. Clark, to whom I take this opportunity of expressing my acknowledgements.

As the *Habitus Academici* is an extremely rare book, I will give a list of the plates, with their titles, and such facts as I have been able to discover respecting the date of publication.

¹ Black's *Folk Medicine*.

Here again I have to thank Mr Clark, who has allowed me to use a letter written to him, since my paper was read, by Falconer Madan, M.A., sub-librarian in the Bodleian Library, Oxford.

The first edition of the *Habitus Academici*, published by George Edwards, consists of a title and eleven plates. The title, which is engraved, like the plates, runs as follows:

Reverendis et Eruditis | Viris In Theologia, Medi- | cina, et Iure
Civili | doctoribus | Academiæ Oxoniensis : | Hæc, omnium Ordinum
(sic) Habituumque | Academicorum Exemplaria | quæ par est Obser-
vantia | D.D. Georgius Edwards.

No engraver's name appears on the title or on any of the plates, and the date is only known from the copy, which once belonged to Anthony Wood and is now in the Bodleian Library (Wood 276^B), there being no date on the volume itself. The figures, 1674, are written at the bottom of the title, probably by Wood himself. The plates are not in any way numbered, nor is the order of them suggested. The price was 2s. 6d.

In a fine copy preserved in the Bodleian Library the plates occur in the following order, and have the following designations engraved upon them:

- [1] Academiæ Procancellarius cum sex Bedellis et virgifero præ-
euntibus.
- [2] Ss. Theologiæ Doctor ea Toga coccinea Indutus qua solenniorum
in Academia conventuum celebritatem cohonestare soleat.
- [3] Ss. Theologiæ Doctor eo Habitu coccineo quo tempore minus
solemni indutus apparet.
- [4] Doctor in Medicinâ Togâ ordinariâ Indutus, cui per omnia con-
formis est ea qua utuntur Doctores in Jure Ciuili.
- [5] Procurator.
- [6] Artium Magister.
- [7] Artium Baccalaureus.
- [8] Commensalis superioris ordinis.
- [9] Juris-Prudentiæ studiosus non-graduatus.
- [10] Commensalis inferioris ordinis.
- [11] Serviens.

Each of these plates is, roughly speaking, nine inches high by five inches wide, except [1], which is rather more than seventeen inches wide—as might be expected, inasmuch as it represents a procession of nine persons.

The work was reprinted (c. 1700?) "by I. Oliver on Lud-gate hill at the Corner of the Old-Baily," to quote his description of himself from his new title. Oliver had evidently obtained possession of the original plates of the *Habitus*, as well as of the title, and reissued them, with the following changes: (a) He removed the title quoted above entirely, and substituted for it "Habitus | Academicorum | Oxoniensium A | Doctore ad Servientem |" leaving out all mention of Edwards; (b) In one of the two copies in the Bodleian Library plates 1, 4, 5, 6, 8, 11 are numbered in the lower left-hand corner, the numbers being engraved on the plate, but none are numbered in the other copy in the Bodleian Library. It is possible, however, that, as the plates are otherwise identical with those of the edition of 1674, there may be copies made up of plates borrowed from both issues.

These plates have been traditionally ascribed to Loggan on the evidence of style only. While I was studying my set, and wondering, before I had read the literature of the subject, whether they belonged to Oxford or to Cambridge, it occurred to me that, having regard to the number of buildings shown in the backgrounds to the figures, a new light would be thrown on the question if I could obtain contemporary panoramas of the two Universities.

With this object in view I turned first, almost by accident, to Loggan's *Oxonia Illustrata*, published in 1675, and at once saw that I had found what I wanted. The work commences with a double plate containing two views of Oxford: "The Prospect of Oxford from the East near London Road," and the same "from the South near Abbington Road." These two "Prospects" are $17\frac{1}{2}$ in. long—a measurement which agrees exactly with that of Plate 1; and it will be found, on examination, that in the majority of cases the buildings shown in that and the other plates tally exactly with those of the South Prospect. The only exceptions are Plates 1, 8, 9, in which the buildings are derived from the East Prospect; and Plate 11, where they are from the same Prospect, but reversed.

I give below the buildings represented in each plate, taken

in order from left to right. The designations are copied from the *Oxonia Illustrata* :

- | | |
|--|---|
| 1. Fryer Bacons Study.
Christ Church.
S. Aldats.
S. Michaels. | 6. The Theater.
All Saints.
S. Maries. |
| 2. New-College.
Magdalen College. | 7. S. Maries.
New College.
Christ Church. |
| 3. All Saints.
The publick Scholes.
Christ Church.
S. Peters in the East. | 8. Christ Church.
S. Peters in the Bailie.
The Castle.
All Saints. |
| 4. The publick Scholes.
Christ Church.
New College.
Magdalen College. | 9. Christ Church.
Magdalen College.
All Saints. |
| 5. The Castle.
S. M. Magd.
S. Peters in the Bailie. | 10. Magdalen College.
11. New College.
The Theater.
The publick Scholes.
S. Michaels. |

It seems to me incredible that anyone should carry forgery so far as not only to draw a series of figures in a style which exactly reproduces that of another artist, but to copy even the buildings which he had used in one of his pictures. I hope, therefore, that the small additional evidence which I have brought forward may be accepted in Loggan's favour. It is unquestionably most curious that he should have taken no pains to ear-mark his work ; and more curious still that his friend Anthony à Wood, to illustrate whose history the *Oxonia Illustrata* was drawn, should, so far as I know, make no allusion in his Diary to this earlier work.

A GOLD HAWKING-WHISTLE, found on Newmarket Heath, was exhibited by W. J. Evans, Esq. A description of it has been kindly supplied by W. B. Redfern, Esq., who has also drawn the accompanying illustration.

The antique bellows-shaped whistle (fig. 11) was exhibited by Mr W. J. Evans, its present owner, and created considerable speculation and interest.

The drawings, giving a full and a side view, are of the exact size of the object and give a careful representation of the ornamentation, consisting, on either side, of a deeply incised cross, retaining traces of enamel, and a partly-effaced pattern of

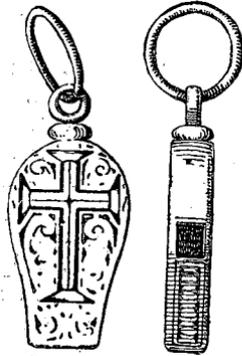


FIG. 11. Gold hunting-whistle found on Newmarket Heath.

elegant scroll-work. It is probably a lady's dog whistle, though it has been described as a hawking, or falconer's whistle, but there is little or no evidence in support of this theory, beyond the fact that it was found on Newmarket Heath, where in olden days the sport of hawking was carried on. As a fact the voice was generally used, though sparingly, to recall the hawk from its flight.

Shakespeare in the play of *Romeo and Juliet* (Act II, Scene 2) makes Juliet exclaim from her balcony

Hist! Romeo, hist!—O for a falconer's voice,
To lure this tassel-gentle back again!

Tassel—correctly *tiercel*—is a male goshawk. The whistle is made of what we now know as pure guinea-gold (22 carats), which is exceedingly soft, and its weight is exactly twelve pennyweights. The prominence of the sacred emblem naturally suggests the idea that it may have belonged to an ecclesiastic, but it does not follow that this should have been the case, as in Catholic times the sign of the Cross was so frequently used for



decorative purposes. The quality of the gold and the excellent workmanship point to its having been the property of someone of position.

The whistle, as mentioned above, was found on Newmarket Heath, in the early part of the eighteenth century, not buried, but so near the surface as to have been kicked up by the hoof of a horse.

ON A BADGE OF THE CAMBRIDGE VOLUNTEERS OF
1798 BELONGING TO MR J. G. MORTLOCK. BY
J. E. FOSTER, M.A.

The badge now exhibited (Plate XV.) is of much local interest.

On the obverse is a figure of a volunteer with palm branches on either side, encircled by the legend in capital letters "Cambridge Volunteers 1798." On the reverse is inscribed "Merit Badge" in capital letters, with "Presented by Colonel J. Cheetham Mortlock to" in script, and "Mr Fordham" in capital letters. The badge is set in a flat ring, with an ordinary ring for suspension at the top. The metal is not silver.

The badge belongs to our member, Mr John George Mortlock of Meldreth Court, who has kindly lent it for exhibition.

The following information about the Volunteers referred to, and other local corps is worth record.

At pages 461, 462 of the 4th volume of the late Mr C. H. Cooper's Annals of the Borough he tells us that in 1798 a sum of £11,000 was raised towards the defence of the country, and that two military associations were formed in the Borough, one called "The Patriotic Association of Cambridge Volunteers," of which Busick Harwood, Professor of Anatomy, was Captain, James Burleigh, Lieutenant, and Matthew Burbage, Ensign; the other called "The Cambridge Loyal Association," formed at a meeting over which Mr John Mortlock, then Mayor, presided.

The *Cambridge Chronicle* of May 26, 1798 contains an account of an inspection of the first-named body, and a paragraph in the number for the 23rd June refers to the

burial of George Favell, Corporal in the Cambridge Loyal Association, which was attended by the members.

The War Office have lately passed over their old records to the Record Office, and amongst them are pay sheets and muster rolls of the Patriotic Volunteers. They are included in the bundle with the classmark Muster Rolls, Militia, No. 4208. They begin on the 10th May, 1798, and end on the 24th April, 1802, when the corps was disembodied, and their arms returned to store. Captain Harwood was promoted Major on the 18th of July, 1799, when Lieutenant Burleigh was promoted Captain.

There do not appear to be any muster rolls of the Loyal Association, and it was probably not embodied.

On the 17th of May, 1802, the peace of Amiens was proclaimed at Cambridge, but the war with France was renewed in the following year, and on the 10th of August, 1803, at a meeting held under the presidency of Mr John Cheetham Mortlock, then Mayor, it was resolved to establish a corps of volunteers, and at a subsequent meeting a subscription towards expenses was opened to which upwards of £2,100 was contributed; 450 men were enrolled under Mr John Cheetham Mortlock as Lieutenant-Colonel.

The pay lists and muster rolls are at the Record Office in the bundle no. 4207 of the class previously mentioned. They extend from Dec. 1803 to Sept. 24, 1808. The corps was organised in six companies, and to these were attached one from Bassingbourn and one from Chesterton. A private named William Fordham was in the latter, and it is to him that the badge may refer. The corps was stationed at Bury St Edmunds from June 1 to June 21, 1804, at Newmarket from July 23 to August 3, 1805, and at Walden from July 15 to July 28, 1808.

Probably this new body was considered to be a revival and consolidation of the two bodies set up in 1798, which may explain the apparent discrepancy between the date on the medal and of the establishment of the corps.

Mr Cooper gives a list of the officers down to 1808, amongst whom many well known Cambridge names occur, beside that of the Colonel. John Deighton, father of the late

Mr Deighton, the surgeon; Elliot Smith, the celebrated auctioneer and land agent of Cambridge and father of Mr John Smith, late of 1, Brookside; Richard Foster, father of Miss Sophia Foster, late of 17, Bateman Street; Henry Balls, father of the late Mr Charles Balls; David Bradwell, father of the late Mr Thomas Bradwell, the builder; and Richard Bevan Turner, father of the late Mr Turner, the postmaster, and grandfather of our present member, Mr George Turner, are amongst the number.

Other local corps were established at this time. At the Record Office are the pay sheets of the Cambridge and Cambridgeshire Riflemen, organized in 1804 under the command of Mr Charles Humfrey. In 1806 a second company was established commanded by Mr Arthur Deck. He had been Lieutenant in Mr Humfrey's company, where Mr Richard Banks Harraden took his place. They also were stationed at Newmarket from July 23 to August 3, 1805, and were disembodied on the 24th Sept. 1808.

In 1803 county companies were established at Shelford and Stapleford under the command of Lord Francis Godolphin Osborne, at Horningsea and Ditton under Captain Wylde, and at Fulbourn under Mr Richard Greaves Townley. Companies from Dullingham and Swaffham were added to these in 1804, and the whole incorporated under the title of the Bournbridge Volunteers.

From notes on the pay sheets, it is probable that they were absorbed into the Local Militia in 1808.

A corps of six companies was formed at Ely, and two additional ones from Isleham and Soham were united to it, and a similar corps was formed at Wisbech, supplemented by companies from Whittlesey and Thorney.

A portrait of Alderman Burleigh, in his uniform as Lieutenant in the Patriotic Volunteers, and his sword, given by the late Mr E. Litchfield, are preserved in the Town Library; also a picture of a member of the University corps.

An account of the expense of equipping the Town Volunteers, and of the subscriptions received for the purpose; appear in the *Cambridge Chronicle* of the 7th of October, 1804, and their

march to and stay at Bury is referred to in the issues of the 2nd and 9th of June of the same year.

On the 27th of July, 1848, old members of the Town Volunteers dined together, and the speeches delivered on the occasion and reported in the *Chronicle* contained many reminiscences of their proceedings.

No pay list of a University Corps is preserved at the Record Office, though one was formed. The *Cambridge Chronicle* contains a list of the members at Christmas 1803, and in the issue of the 2nd June 1804 is an account of a special muster on Parker's Piece, when a sum of Two Hundred Guineas was presented to Captain Bircham of the 30th Regiment, who was giving up the adjutancy to rejoin his regiment in Ireland. The presentation was made by Lord Palmerston, the future Prime Minister, then at St John's College, who was in command of one of the Divisions, and a piece of plate and a sword were subsequently forwarded to the Captain.

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